Automated Cartridge System Library Software

Messages

Version 6.1.1

313495902

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Storage Technology Corporation
Manager, Software Information Development, MS 5209
One StorageTek Drive
Louisville, Colorado 80028–5209
OR
E–mail us at: **sid@stortek.com**

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Contents

About this Book

The messages listed in this book are ACSLS Event Log messages that are likely to appear most frequently in the Log.

Some of the messages in this book also appear in the Display area of the command processor as unsolicited messages. Other locations for ACSLS messages include the following:

- The command area of the command processor
- UNIX command tool window
- The files in the log directory (`$LOG_PATH`)

Audience

This book was written for system administrators and library operators who perform library commands and other ACSLS functions.

Reader's Comments

We'd like to know what you think about this book. If you prefer, you can e-mail your comments to Software Information Development directly. Our Internet address is:

sid@stortek.com

Be sure to include the document title and number with your comments.

About the Software

This book supports ACSLS 6.1.1.

Note: The StorageTek Customer Resource Center (CRC) on the World Wide Web lets you download ACSLS PTFs and software support for product enhancements such as new drive or library types.

To access ACSLS PTFs and software support for product enhancements:

1. Using an Internet browser such as Netscape, go to the StorageTek CRC. The URL is:

   `http://www.support.storagetek.com/`

2. Select the `Request a Login and Password` link.

3. Fill in the information requested in the form.

   You should receive your account ID and password within two days.

4. After you are logged in, select
   Product Information
   Current Products
   Select a Product Family: Software
   Select ACSLS
   (You may want to “View All” to see all the maintenance or documentation.)

How this Guide is Organized

This book contains the following information on each message:

- The message text
- An explanation of the message
- A description of any variables appearing in the message
- The action required to respond to the message

Conventions for Reader Usability

Conventions are used to shorten and clarify explanations and examples within this book.

Typographic

The following typographical conventions are used in this book:

- **Bold** is used to introduce new or unfamiliar terminology, or it's used in steps to indicate either an action or a decision the user has to make.
- `Letter Gothic` is used to indicate filenames, command names, and literal output by the computer.
- **`Letter Gothic Bold`** is used to indicate literal input to the computer by you.
- *`Letter Gothic Italic`* is used to indicate that you must substitute the actual value for a command parameter. In the following example, you would substitute your name for the "username" parameter.

  `Logon` *`username`*

- A bar (|) is used to separate alternative parameter values. In the example shown below either username or systemname must be entered.

  Logon *username* | *systemname*

- Brackets [ ] are used to indicate that a command parameter is optional.

Enter Command

The instruction to "press the [[ENTER]] key" is omitted from most examples, definitions, and explanations in this book.

For example, if the instructions asked you to "enter" **Logon pat**, you would type in **Logon pat** *and* press [[ENTER]].

However, if the instructions asked you to "type" **Logon pat**, you would type in **Logon pat** and you would *not* press [[ENTER]].

Technical Support

Refer to the *Requesting Help from Software Support*, automatically shipped in hard copy only with the ACSLS 6.1.1 program package, for information about contacting StorageTek for technical support and for requesting changes to software products.

Related Documentation

ACSLS 6.1.1 Documentation

The following publications provide more information about ACSLS 6.1.1:

- The *ACSLS 6.1.1 Information CD–ROM*, part number: 313495503, which is automatically shipped with the 6.1.1 program package and provides PDF format of all the ACSLS 6.1.1 publications.
- *ACSLS Product Information*, part number: 313496102, also provided in PDF format on the *ACSLS 6.1.1 Information CD-ROM* and on the StorageTek Customer Resource Center (CRC). It is also shipped in hardcopy.
- *ACSLS Installation, Configuration, and Administration Guide* , part number: 313495803, in PDF format on the *ACSLS 6.1.1 Information CD–ROM* and on the StorageTek Customer Resource Center (CRC); hardcopy of the guide is also shipped with the program package.
- *ACSLS Quick Reference*, part number: 313496002, which is shipped with the 6.1.1 program package.
- ACSLS 6.1.1 *Read Me First*, part number: 313496202, which is shipped with the 6.1.1 program package.

ACSLS Information on the StorageTek CRC

In addition to the PDF collections on the *ACSLS 6.1.1 Information CD–ROM*, the StorageTek CRC provides PDF collections for ACSLS 6.1.1. Use the following procedure to access this collection on the StorageTek CRC.

To access ACSLS PDF collections on the StorageTek CRC:

1. Using an Internet browser, go to the StorageTek CRC. The URL is:

   `http://www.support.storagetek.com/`

2. Select the `Request a Login and Password` link.

3. Fill in the information requested in the form.

   You should receive your account ID and password within two days.

4. When you receive your account information, go back to the CRC and select the `Login` link.

   When prompted, fill in your User ID and password.

5. After you are logged in, select
   Product Information
   Current Products
   Select a Product Family: Software
   Select ACSLS
   (You may want to “View All” to see all the maintenance or documentation.)

ACS Hardware Information on the StorageTek CRC

The StorageTek CRC provides PDF file format of many of StorageTek's ACS hardware publications. Use the following procedure to access these publications on the StorageTek CRC.

To access StorageTek ACS hardware documentation on the StorageTek CRC:

1. Using an Internet browser such as Netscape, go to the StorageTek CRC. The URL is:

   `http://www.support.storagetek.com/`

2. Select the `Request a Login and Password` link.

3. Fill in the information requested in the form.

   You should receive your account ID and password within two days.

4. When you receive your account information, go back to the CRC and select the login link.

   When prompted, fill in your User ID and password.

5. After you are logged in, select
   Product Information
   Current Products
   Select a Product Family: Hardware
   Select the hardware product documentation you want.

Event Log Messages

This book lists Event Log messages in numeric order. The message number is the number that appears at the beginning of the second line of the message you see in the Event Log. In this book, the message number is followed by the message text, which is the last line you see in the Event Log message. For a description of the complete message that you see in the Event Log, go to “Format for Messages” on page 2.

Each message description in this book contains the following information:

- The message number and message text
- An explanation of the message
- A description of any variables appearing in the message
- Any action necessary to respond to the message

Format for Messages

All Event Log entries have a consistent format. Each entry contains a one-line prefix followed by module information and two or more lines of message text.

Event Log Format

The generic format for all entries is:

```
mm-dd-yy hh:mm:ss component_name[nn]:
message_number classification mod_id mod_ver mod_line
function: One or more lines of message text...
```

A specific example of an Event Log entry is:

Example:

```
12-06-95 10:58:32 storage server[0]:
351 N ss_main.c 5.24 562 ss_main:01
Initiation completed
```

The first line of the message contains three elements:

- *mm-dd-yy hh:mm:ss* are the date and time of entry.
- *component_name* is an abbreviation for the originating library server component, for example, ACSLM, ACSSA, CSI, storage server, etc.
- [*nn*] is the request ID enclosed in square brackets. This ID is generated by the ACSLM when it receives a valid request. You can enter a `query` request command to check the status of the request specified by the request ID.

The second and subsequent lines contain the following information:

- *message_number* is the number of the message.
- *classification* is a one-letter classification of the message. These classifications are as follows:
  - **N** – not classified
  - **I** – information only
  - **E** – error
  - **W** – warning
- *mod_id*, *mod_ver*, and *mod_line* indicate respectively the file name of the ACSLS module that generated the message, the module version, and the module line number. These identifiers are included to help StorageTek support personnel isolate the cause of the problem. They are not intended to be used by system administrators or library users.
- *function* is the component function that generated the message. Error messages (E) generally include function. Informational messages (I) generally omit function. (See line three of the generic format for all entries, shown on the preceding page).
- *message text* is the message itself. Note that the message may take up one or more lines of text.

Gathering Diagnostic Information for ACSLS Issues

When the action required in response to an error message is to call StorageTek Software Support you will need to provide diagnostic information so that StorageTek Software Support can assist you to resolve the problem. The minimum you will need to provide is the Event Log containing the error message. The following describes additional information that may be useful for diagnosing problems.

Requesting Help from Software Support

For more information about contacting StorateTek Software Support, download *Requesting Help from Software Support.* Go to the StorageTek website (www.support.StorageTek.com) using your usual login and password. Click on Customer Resource Center and choose “Product Support” from the “User Services” menu. Click on “on–line guide” under “Special Notes” in the Software row of the Technical Support table.

Gathering ACSLS Diagnostic Information

Use the data gathering tool to collect complete ACSLS diagnostic information for StorateTek Software Support.

- Login as **root**
- Change to the `diag/bin/` directory

  cd $ACS_HOME/diag/bin
- Gather diagnostic information

  ./get_data.sh
- This creates a file containing a collection of diagnostic informtion: `$ACS_HOME/log/output.tar.Z`
- After you contact StorageTek Software Support about your issue, please send them the `$ACS_HOME/log/output.tar.Z` file.

Gathering Additional Diagnostic Information Requested by ACSLS Support

ACSLS Support may request that a customer gather additional diagnostic information, including traces of communications between ACSLS and both clients and tape libraries.

Messages

0 I *message text*

Explanation: An error occurred and is described by the variable *message text*.

Variable: *message text* describes the error.

Action Required: Resolve the error condition; if you need assistance, gather the information required, described above, and collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support. This error message may indicate a lost volume condition; for more information, see “Recovering Errant (Lost) Volumes” in “Appendix B: Troubleshooting” of the *ACSLS Installation, Configuration, and Administration Guide*.

1 N unexpected status = *status*

Explanation: An ACSLS function received an unexpected status code from another ACSLS function.

Variable: *status* is the code being passed between functions.

Action Required: If the error recurs, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

4 N LSM *lsm_id*: Access door closed

Explanation: The LMU has passed a message to ACSLS which indicates that the LSM access door was just closed.

Variable: *lsm_id* is the LSM whose access door is closed.

Action Required: None; this message is informational only.

5 N LSM *lsm_id*: Access door opened

Explanation: The LMU has passed a message to ACSLS that indicates that the LSM access door was just opened.

Variable: *lsm_id* is the LSM whose access door is open.

Action Required: None; this message is informational only.

6 N ACS Identifier *acs_id* Invalid

Explanation: The ACS identifier or variable is in the wrong format or has an invalid value.

Variable: *acs_id* is the ACS identifier that is invalid.

Action Required: Enter the correct format (see "Component Types and Identifiers" in the "General Command Syntax" section of the "Command Reference" Chapter of the *ACSLS Installation, Configuration, and Administration Guide*) for the correct format for the ACS identifier.

9 N LSM Identifier *lsm_id* Invalid

Explanation: The LSM identifier or variable is in the wrong format or has an invalid value.

Variable: *lsm_id* is the LSM identifier that is invalid.

Action Required: Enter the correct format (see "Component Types and Identifiers" in the "General Command Syntax" section of the "Command Reference" Chapter of the *ACSLS Installation, Configuration, and Administration Guide*) and/or the correct identifier value.

20 N Invalid exit status *status* returned from PID *process-id*

Explanation: The exit status returned from the process ID (PID) was not considered a valid exit status.

Variable:

- *status* is the exit status returned from the process ID.
- *process-id* is the process ID value.

Action Required: Collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

37 N LMU READY received for ACS Identifier *acs_id*

Explanation: An LMU has been placed online.

Variable: *acs_id* is the identifier of the ACS to which the LMU is connected.

Action Required: None; this message is informational only.

38 N LSM NOT READY received for LSM Id *lsm_id*.

Explanation: The LSM has been taken offline.

Variable: *lsm_id* is the identifier of the LSM that has gone offline.

Action Required: None; this message is informational only.

40 N LSM READY received for LSM Identifier *lsm_id*.

Explanation: The LSM has been placed online.

Variable: *lsm_id* is the identifier of the LSM that is online.

Action Required: None; this message is informational only.

43 N PORT OFFLINE received for PORT Id *port_id*

Explanation: A port between the server system and the LMU has been taken offline.

Variable: *port_id* is the identifier of the port that has gone offline.

Action Required: None; this message is informational only.

53 N cell *cell_id* - Reserved too long by another process

Explanation: A cell record in the database has been reserved by another process, and the audit is unable to access it after the appropriate number of retries and timeouts. The audit continues with the next cell. This error indicates that the system is under a heavy load.

Variable: *cell_id* is the identifier of the cell record.

Action Required:

1. Issue a query request all to see if there are any requests active for the cell. See the "Command Reference" Chapter of the *ACSLS Installation, Configuration, and Administration Guide* for information on issuing commands.
2. If there are no requests active, issue an audit request for the subpanel containing the designated cell. See the "Command Reference" Chapter of the *ACSLS Installation, Configuration, and Administration Guide* for information on issuing commands.
3. If the problem persists, a software failure has occurred and the library server must be restarted. See the "Command Reference" Chapter of the *ACSLS Installation, Configuration, and Administration Guide* for information on issuing commands.

54 N Cell *cell_id* - Missing cell detected

Explanation: The LSM robot is unable to locate a storage cell in the LSM. Possible causes are that the L-shaped target has been wiped off the cell or the cell carrier has detached from the LSM wall. This is a library configuration error and causes the library server to terminate.

Variable: *cell_id* is the location of the missing cell.

Action Required: The audit should be rerun after the error has been corrected and the library server has been reinitiated.

55 N Panel *panel_id* - Audit of panel completed

Explanation: For ACS, LSM, or server audits, this message is written to the Event Log for each panel that has been audited.

Variable: *panel_id* is the location of the panel that has been audited.

Action Required: None; this message is informational only.

65 N Cartridge *vol_id* found at location *cell_id*

Explanation: A tape cartridge **not** listed in the database has been found in the ACS. The cartridge is added to the database.

Variable:

- The *vol_id* is the external label of the tape cartridge.
- The *cell_id* is the storage cell location where the cartridge was found.

Action Required: None; this message is informational only.

66 N Cartridge *vol_id*, new location *cell_id*

Explanation: A tape cartridge is not in the location defined by the database. The cartridge is not moved in the ACS; instead, the database is updated to reflect the new storage location.

Variable: The *vol_id* is the external label of the tape cartridge. The *cell_id* is the assigned storage cell location of the cartridge.

Action Required: None. This message is informational only.

67 N Cartridge *vol_id* not found

Explanation: A tape cartridge listed in the database was not found in the ACS. The cartridge was removed from the database.

Variable: The *vol_id* is the external label of the tape cartridge.

Action Required: None; this message is informational only.

75 N Unexpected Automatic Enter Request received: discarded.

Explanation: The CAP closed at a time when the request queue was empty. There was no matching request to which the CAP closure should be associated. The CAP closure is ignored.

Action Required: Observe related event log messages for clues to the possible cause of this condition.

81 N ACS *acs_id* configuration failed to verify

Explanation: The ACS configuration in the library server database does not match the configuration defined in the LMU. Recovery processing terminates.

Variable: *acs_id* is the unique identifier of the ACS.

Action Required: After recovery processing terminates, rerun the library server `acsss_config` program to redefine the library configuration in the database (see the *Installation and Configuration Guide* for your platform).

83 N Drive *drive_id*: Configuration failed to verify

Explanation: The recovery process was unable to successfully verify the drive configuration in the database against the configuration defined in the LMU. This condition may be because the LSM is offline or because there is an actual configuration mismatch.

Variable: *drive_id* is the unique identifier of the drive.

Action Required: Issue a `query lsm` request to display the state of the LSM. If it is online, you must run the `acsss_config` program to redefine the configuration in the library server database:

1. Check the drive for any problems.
2. If there are drive problems, fix them.
3. `Vary` the drive and the LSM online.
4. If the problem persists, or if the drive is new or has been removed, run `acsss_config`. See "Chapter 6: Configuring your Library Hardware" in the *ACSLS Installation, Configuration, and Administration Guide* for more information on procedures for reconfiguring ACSLS.

85 N LSM *lsm_id*: configuration failed to verify

Explanation: The LSM configuration in the database does not match the configuration defined in the LMU. Recovery processing terminates. This message will be followed by a `Server system recovery failed` message.

Variable: *lsm_id* is the LSM whose configuration does not match that defined in the LMU.

Action Required: Check previous Event Log entries for additional information about the failure. Follow the suggested action for the associated error message(s).

87 N ACS *acs_id*: No ports online: marked offline

Explanation: The server system is not able to communicate with any ports for the specified ACS. Recovery will continue, but the ACS and its LSMs are marked as offline in the database.

Variable: *acs_id* is the ACS that was updated.

Action Required: When recovery completes, do the following:

1. Vary the port online.
2. Does this correct the problem?

YES	Vary the ACS online. Action completed.
NO	Follow the remaining steps in this procedure.

3. Find and fix any problem with the port. Among other conditions, check these:
   - The LMU is down.
   - A cable is missing or there is a bad connection.
   - The port is bad.
4. Vary the port online.
5. Vary the associated ACS(s) online.

   Note: If you have more than one ACS, repeat the steps above for each additional ACS.

88 N `No server ports online`

Explanation: The server system is not able to communicate with any ACS. Recovery continues, but all ACSs and their LSMs are marked as offline.

Action Required: To vary an ACS online, at least one communications port to the ACS must be online. When recovery completes, do the following:

1. Issue `vary online` requests to the appropriate port(s).
2. Vary all associated ACSs online.

89 N `Port` *`port_id`*`: Failed to go online: marked offline`

Explanation: The server system can not communicate with a port to an ACS. The port is marked offline in the database.

Variable: *`port_id`* is the port that failed to go online.

Action Required: Check the communications line between the server system and the LMU. If the line is intact, issue a `vary online` request for the designated port.

94 N `Cell` *`cell_id`*`: Corrected cell status to` *`status`*

Explanation: The status of a cell record was updated based on ACSLS processing.

Variable:

- *`cell_id`* is the specific cell which was updated.
- *`status`* indicates the new status of the cell.

Action Required: None. This is a notification only.

95 N Drive *drive_id*: Corrected drive status to *status*

Explanation: The status of a drive record was updated based on ACSLS processing.

Variable:

- *drive_id* is the specific drive which was updated.
- *status* indicates the new status of the drive.

Action Required: None. This is a notification only.

96 N Volume *vol_id*: Corrected volume status to *status*

Explanation: The status of a volume record was updated based on ACSLS processing.

Variable:

- *vol_id* is the specific volume which was updated.
- *status* indicates the new status of the volume.

Action Required: None. This is a notification only.

100 N LSM *lsm_id:* Hardware failed to vary offline/online: marked offline

Explanation: A request to vary an LSM offline was processed to completion, but the LSM failed to vary offline.

Variable: *lsm_id* is the LSM in the request.

Action Required: Run the library diagnostics to help isolate the cause of the problem (see the appropriate hardware maintenance manual for instructions). If more help is needed, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

101 W LSM *lsm_id* is full; volume *vol_id* cannot be recovered and is deleted

Explanation: ACSLS found this volume in the playground/in–transit cell or in a PCP cell while recovering an LSM. It attempted to recover the volume by moving it to a new home cell in this LSM. However, the volume could not be recovered, as the LSM was full, so the volume was marked deleted in the database.

Variable:

- *lsm_id* identifies the LSM being recovered.
- *vol_id* identifies the deleted volume.

Action Required:

1. Eject a volume from the LSM.
2. Vary the LSM offline and back online to recover the volume.

105 N *component component_id*: Overridden by another vary request

Explanation: The specified component was not varied to the specified state because the request was overridden by another `vary` request.

Variable:

- *component* is the library component (for example, ACS).
- *component_id* is the identifier of the library component.

Action Required: None; this message is informational only. If desired, resubmit the `vary` request.

113 N File *file*: *operation* failed on \"%s\" (errno=*error_no*)

Explanation: An operation performed on an Event Log file failed.

Variable:

- *file* is the file on which the operation failed.
- *operation* is the operation that failed.
- *error_no* is the system error number associated with this file operation problem.

Action Required: Collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

115 N Volume *vol_id*: Corrected volume type from *media_type1* to *media_type2* cartridge

Explanation: An ACSLS audit detected a volume with an incorrect media type. The audit updated the ACSLS database with the correct volume media type.

Variable:

- *vol_id* is the volume ID.
- *media_type1* is the incorrect volume media type.
- *media_type2* is the corrected volume media type.

Action Required: None; this message is informational only.

122 E `surr_main (PID #####): Creating socket SURROGATE failed on "#####"`

Explanation: The Surrogate main routine tried to create a socket (using the socket() system call) to listen for requests from the Library Management Gateway. Each Surrogate process that is running has its own unique socket. The system's response is to use the acsss_daemon to abnormally terminate the IPC Surrogate and automatically restart ACSLS (up to 10 times).

Variable: ##### is the process ID of the Surrogate trying to create a socket.

Action Required:

- Look for associated errors that may indicate why the socket() call failed.
- Kill the ACSLS system using the kill.acsls command, then kill any additional "zombie" ACSLS processes (using a ps | grep acs)
- Then restart ACSLS. It may be necessary to reboot the ACSLS host to release any hung sockets.
- If the problem persists, check to see whether UNIX system limits have been exceeded on sockets, file descriptors, or other network resources.
- If the problem persists, collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

125 N Volume *vol_id*: Locked volume deleted, lock was *lock_id*

Explanation: A volume with a non-zero lock identifier was deleted.

Variable:

- *vol_id* is the volume identification.
- *lock_id* is the identifier of the lock.

Action Required: None; this message is informational only.

126 N Timed out waiting for message

Explanation: A process passed an internal request to another process. The latter did not respond within the designated timeout period.

Action Required: Observe related event log messages for clues to the possible cause of this condition.

130 E surr_main (PID #####): Environment variable SURROGATE_QUEUE_AGE is not defined or has a null value: exiting

Explanation: The Surrogate main routine was unable to get the SURROGATE_QUEUE_AGE dynamic environment variable or the variable is not correctly set. IPC Surrogate terminates.

Variable: ##### is the process ID of the Surrogate issuing the error.

Action Required: Define the SURROGATE_QUEUE_AGE variable with the acsss_config program.

130 E `surr_main (PID #####): Environment variable SURROGATE_TIMEOUT is not defined or has a null value: exiting`

Explanation: The Surrogate main routine was unable to get the `SURROGATE_TIMEOUT` dynamic environment variable or the variable is not correctly set. IPC Surrogate terminates.

Variable: ##### is the process ID of the Surrogate issuing the error.

Action Required: Define the `SURROGATE_TIMEOUT` variable with the acsss_config program.

130 E `surr_main (PID #####): Environment variable SURROGATE_PORT is not defined or has a null value: exiting`

Explanation: The Surrogate main routine was unable to get the `SURROGATE_PORT` dynamic environment variable or the variable is not correctly set. IPC Surrogate terminates.

Variable: ##### is the process ID of the Surrogate issuing the error.

Action Required: Define the SURROGATE_PORT variable with the acsss_config program.

135 N `Unexpected ACSLH catalog status` *`status`* `detected`

Explanation: After a catalog request was issued by an ACSLS component,a response was received but contained a status code which was not expected by the requesting component.

Variable: *`status`* is the specific status code.

Action Required: None. Refer to the event log for additional information.

141 N `Unexpected message detected, IPC identifier is` *`ipc_id`*

Explanation: An orphaned response is returned from one process to another that does not match any outstanding request.

Action Required: Observe related event log messages for clues to the possible cause of this condition.

146 N Unexpected status *status* detected

Explanation: An ACSLS function received an unexpected status code from another ACSLS function.

Variable: *status* is the code being passed between functions.

Action Required: If the message recurs, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

148 N Volume *vol_id* Unknown media type detected

Explanation: While performing Cartridge Recovery, a cartridge with a readable label was encountered for which no volume record was recorded in the database. In the process of adding a volume record, an attempt was made to determine volume type based on media type. That attempt failed because the media type was unknown.

Variable: *vol_id* is the specific volume identifier of the cartridge.

Action Required: None.

149 N Removing file *file*: failed on *cause of failure*

Explanation: An operation performed on an Event Log file failed.

Variable:

- *file* is the name of the event log file.
- *cause of failure* is the cause of the operation’s failure.

Action Required: Collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

152 N Unsupported version *version* packet detected: discarded

Explanation: The ACSLS CSI detected an unsupported packet version on a request.

Variable: *version* is the unsupported packet version.

Action Required: Either update the client application to use a supported packet version or, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

153 N Volume *vol_id*: Found in *cell/CAP/drive/recovery* *cell_id/CAP_id/drive_id/cell* added

Explanation: This message is issued when a misplaced tape is found in the library by vary or CAP processing.

Variable:

- *vol_id* is the identifier of the volume that was found.
- *cell/CAP/drive/recovery* is the location type where the volume was found.
- *cell_id/CAP_id/drive_id/cell* is the identifier of the location where the volume was found. Note that, in the case of a volume being found in the playground area (*recovery*), only the word *cell*, not the *cell_id*, is output.

Action Required: None. This message is informational only.

154 W Misplaced cartridge detected; volume *vol_id* cannot be recovered and is deleted

Explanation: ACSLS found this volume in the playground/in–transit cell or in a PCP cell while recovering an LSM. It attempted to recover the volume by moving it to a new home cell in this LSM. However, the move failed because the destination cell contained a cartridge. The volume has not been recovered and is marked deleted in the database.

Variable: *vol_id* identifies the deleted volume.

Action Required:

1. Check to make sure that the problem is not a single misplaced cartridge.
2. If it is not, audit the LSM to update the ACSLS database to match the actual contents of the library.
3. Vary the LSM offline and back offline to recover the volume.

155 N Volume *vol_id*: New home location is cell *cell_id*

Explanation: When checking a storage cell, Cartridge Recovery encountered a cartridge that appeared to be misplaced. The recorded home cell for that cartridge was checked and found to be either empty or full with some other cartridge.

Variable:

- *vol_id* is the specific volume identifier of the cartridge.
- *cell_id* is the cell in which the cartridge was found.

Action Required: None. The volume record for this cartridge is updated to reflect the new home cell location.

187 N audit started

Explanation: Audit processing has begun.

Action Required: None; this message is informational only.

240 E Cartridge Recovery () unexpected status = STATUS_LIBRARY_NOT_AVAILABLE

Explanation: When checking storage cells, Cartridge Recovery was unable to check an LSM that was idle.

Action Required: None; this message is informational only.

241 N audit completed not all cartridges were ejected, messages lost status = *audit_completion_status*

Explanation: A spawned audit process has sent an incomplete or unintelligible message to the parent audit process. As a result, some errant cartridges may not be ejected.

Variable: *audit_completion_status* is the status of the audit upon its completion.

Action Required: To respond to this message, do the following:

1. Check previous Event Log entries to determine the reason for the lost message(s).
2. If the *audit_completion_status* is Audit cancelled or Audit failed, the audit should be rerun.
3. If the audit continues to fail, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

243 N audit completed

Explanation: Audit processing has completed successfully.

Action Required: None; this message is informational only.

244 N audit cancelled not all cartridges were ejected, messages lost status = *audit_completion_status*

Explanation: A spawned audit process has sent an incomplete or unintelligible message to the parent audit process. As a result, some errant cartridges may not be ejected.

Variable: *audit_completion_status* is the status of the audit upon its completion.

Action Required: To respond to this message, do the following:

1. Check previous Event Log entries to determine the reason for the lost message(s).
2. If the *audit_completion_status* is Audit cancelled or Audit failed, the audit should be rerun.
3. If the audit continues to fail, collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.
4. If the *audit_completion_status* is Audit complete, no action is required, as the audit has completed successfully.

245 N audit cancelled

Explanation: Audit processing has been cancelled. The database may have discrepancies or errant cartridges may not have been ejected.

Action Required: None; this message is informational only.

246 N audit failed not all cartridges were ejected, messages loststatus = *audit_completion_status*

Explanation: A spawned audit process has sent an incomplete or unintelligible message to the parent audit process. As a result, some errant cartridges may not be ejected.

Variable: *audit_completion_status* is the status returned by the audit.

Action Required: To respond to this message, do the following:

1. Check previous Event Log entries to determine the reason for the lost message(s).
2. If the *audit_completion_status* is Audit cancelled or Audit failed, the audit should be rerun.
3. If the audit continues to fail, collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.
4. If the *audit_completion_status* is Audit complete, no action is required, as the audit has completed successfully.

247 N audit failed

Explanation: Audit processing has terminated due to some error condition. The description of the error is displayed in the Command Area. The database may have discrepancies or errant cartridges may not have been ejected.

Action Required: Check previous Event Log entries to determine the cause of the failure. Follow the suggested action for the associated message(s). Once this is done, rerun the audit.

252 N audit failed not all cartridges were ejected, status = *status*

Explanation: An ACSLS audit was interrupted (for example, by an `idle force` command or a hardware failure).

Variable: *status* describes the event that interrupted the audit.

Action Required: Resubmit the audit.

317 N Lock request size incorrect .Req = *string1*, Exp = *number1*, Rec = *number2*

Explanation: The size of the lock request submitted does not match the expected byte count.

Variable:

- *string1* is the current type of lock request.
- *number1* is the expected byte count of the current lock request.
- *number2* is the actual byte count of the current lock request.

Action Required: Re-submit the lock request with the correct information in the request.

347 N Initiation started, *acsss_version*

Explanation: Library server initiation has begun.

Variable: *acsss_version* is the ACSLS version number.

Action Required: None; this message is informational only.

351 N Initiation completed (library server)

Explanation: Product initiation completed successfully.

Action Required: None; this message is informational only.

352 N `wait() return invalid PID` *PID*

Explanation: The *PID* returned by wait is not the expected PID.

Variable: *PID* is the process ID returned by wait().

Action Required: Restart ACSLS, if needed. If restarting ACSLS fails after three tries, collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

354 N `exit status (`*status_code*`),` *status*`, received from` *process_name*

Explanation: The library server daemon has received an unexpected exit status from a library server process.

Variable:

- *status_code* is the library server status code that was generated as a result of the exit.
- *status* is the numeric exit status from the process.
- *process_name* is the library server process.

Action Required: If this error occurs when not shutting down ACSLS or issuing an `idle force` command, check the following conditions:

Condition	Action
Processing continues, no more errors.	No action. Message informational only.
Processing continues but the same error continues over a period of days, weeks, or months.	Collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.
Processing does not continue.	Collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

355 N signal (*signal_num*) terminated *process_name*

Explanation: An ACSLS process died from the specified signal. ACSLS will either restart the process or terminate depending on which process terminated. This message is informational only if it was received when shutting down ACSLS.

Variable:

- *signal_num* is the signal number received that terminated the process.
- *process_name* is the library server process that terminated.

Action Required: Restart ACSLS, if needed. See "Restarting ACSLS" in "Chapter 1: Overview" of the *ACSLS Installation, Configuration, and Administration Guide* for procedures on restarting ACSLS. If restarting ACSLS fails after three tries, collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

356 N Termination invoked, *termination_status*

Explanation: Library server termination has begun.

Variable: *termination_status* is the library server status code which indicates the reason for the termination.

Action Required: Follow the suggested action for the appropriate *termination_status*:

If *termination_status* is STATUS_TERMINATED, there is no action, as this indicates a manually invoked termination of the software by the acsss user.

If *termination_status* is STATUS_DATABASE_ERROR, use the following procedure:

1. Attempt to restart the library server software with the rc.acsss command file.

   You may be prompted for the acsss user password. If you are acsss or root, you will not be prompted.

2. Did the library server restart successfully?

YES	Go to Step 3.
NO	Go to Step 4.

3. Run the database recovery utility, rdb.acsss (as the acsss user).

   a. rdb.acsss prompts you to enter a tape**.** Enter the most recent backup tape you have, since this utility writes over your existing database. (If you do not

      have a current backup tape, enter [[CTRL]]+C to quit out of this procedure.)

   b. When rdb.acsss completes successfully, attempt to restart the library server software with the rc.acsss utility.

4. Perform an audit to reconcile the database with the physical contents of the library.

5. If none of the above steps are successful, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

   If *termination_status* is STATUS_CONFIGURATION_ERROR, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support. Your support representative will adjust the LMU configuration to make it match the physical configuration of the library. Once this has been done, rerun the library server configuration program to redefine the library configuration in the database.

   If *termination_status* is STATUS_RECOVERY_FAILED, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

357 N wait failed, ret = *wait_return_code*, errno= *error_no*

Explanation: The UNIX system call wait() failed.

Variable: .

- *wait_return_code* is the code returned by the wait.
- *error_no* is the system error number.

Action Required: Restart ACSLS, if needed. If restarting ACSLS fails after three tries, collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

361 N *process_name* restarted, pid *process_id*

Explanation: A library server process has been automatically restarted.

Variable:

- *process_name* is the library server process that was terminated.
- *process_id* is the library server process identifier.

Action Required: If this message recurs over a period of days, weeks, or months, Collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

368 N Unreadable Label *cell_id*

Explanation: The robot was unable to decipher the external label of the volume.

Variable: *cell_id* is the storage cell location where the volume resides.

Action Required: Eject the volume and inspect the label. If you cannot determine which volume to eject, submit the following command:

sql.sh "select volid from volumetable where acs=*v* **and lsm=***w* **and panel=***x* **and row=***y* **and column=***z***."**

where *v*, *w*, *x*, *y*, and *z* are the corresponding values for acs, lsm, panel, row, and column.

If this error occurs frequently with good labels, contact your StorageTek Customer Service Engineer (CSE) to inspect the robotic vision system.

371 N Destination location full: *cell_id*/*drive_id*

Explanation: The storage cell to which a cartridge was to be dismounted is full although the database indicates it is empty. The robot will retry the dismount until it finds an available cell. The most likely cause for this error is that someone entered the LSM and moved a cartridge manually.

Variable:

- *cell_id* is the storage cell location indicated in the database.
- *drive_id* is the identifier of the tape drive.

Action Required: You should perform an `audit` on the LSM to reconcile the database with the physical contents of the LSM.

372 N Source location empty: *cell_id*

Explanation: A cartridge marked for ejection was not found in its storage cell when the robot went to move it to the CAP. The `audit` terminates. This error is most likely the result of a hardware failure in the robot.

Variable: *cell_id* is the identifier of the cell where the cartridge marked for ejection should have been.

Action Required: Check previous entries in the Event Log for additional information about the error. Use the proper LSM entry procedure and check the robot's hands for in-transit cartridges; remove any cartridges that you find there. Repeat the `audit` after varying the LSM back online.

376 N Drive *drive_id*: No cleaning cartridge available.

Explanation: The specified drive requires cleaning but no cleaning cartridges are available. The mount proceeds.

Variable: *drive_id* is the identifier of the tape drive.

Action Required: Add more cleaning cartridges, making sure these are compatible with the drive type. See "Defining Cleaning Cartridges" in the "Cleaning Transports" section of "Chapter 9: Cartridge Management" of the *ACSLS Installation, Configuration, and Administration Guide* for information about adding cleaning cartridges.

377 N mc_mo_error: Cleaning failed. Drive *drive_id*

Explanation: The mount operation involving a cleaning cartridge failed.

Variable: *drive_id* is the identifier of the drive requesting the cleaning operation.

Action Required: Observe the associated error messages in the event log to determine the root cause of the failure.

383 N Cleaning cartridge *vol_id*: Usage limit exceeded.

Explanation: Automatic cleaning of a drive has caused a cleaning cartridge to exceed its specified maximum usage. The cleaning cartridge will no longer be available for automatic cleaning selection.

Variable: *vol_id* is the identifier of the cleaning cartridge.

Action Required: Eject the cleaning cartridge.

386 N Source location empty: *cell_id*

Explanation: The LSM robot was unable to find the tape cartridge in the location indicated by the database. The request fails.

Variable: *cell_id* is the storage cell location indicated in the database.

Action Required: The most likely cause for this error is that someone entered the LSM and moved the cartridge manually. You should perform an `audit` on the LSM to reconcile the database with the physical contents of the library.

387 N Cartridge in *cell_id*, unreadable label

Explanation: The LSM robot was unable to read the label of the cartridge found in the specified drive. The request fails.

Variable: *cell_id* is the storage cell location indicated in the database.

Action Required: Eject the cartridge. Correct the label problem and re-enter the cartridge.

400 N Volume record created for *vol_id*.

Explanation: A cell or drive marked reserved is found to contain a tape cartridge that does not exist in the database. A record is created for the new volume. This message usually appears together with the drive (*drive_id*) readable, marked in use message.

Variable: *vol_id* is the volume record that was created.

Action Required: We recommend that you perform an audit of the LSM to reconcile the database with the physical contents of the library.

405 N Table lookup failure m_id: *m_id*

Explanation: A message processing error occurred for a mount request. The mount is identified as incomplete due to some failure.

Variable: *m_id* is the mount request ID.

Action Required: If the problem recurs, collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

435 N Volume: *vol_id* may be jammed in drive: *drive_id*

Explanation: The specified volume is jammed in the specified transport.

Variable:

- *vol_id* is the jammed volume.
- *drive_id* is the drive that contains the jammed volume.

Action Required: The jammed volume must be manually unloaded from the drive; if necessary, contact hardware support.

436 N Cartridge *vol_id*, new location *cell_id*

Explanation: This message reports the recording of a new location for the cartridge in the ACSLS database.

Variable:

- *vol_id* is the volume identifier of the volume that was moved.
- *cell_id* is the new location of the moved volume.

Action Required: None; this message is informational only.

437 N volume (*vol_id*) not in drive (*drive_id*), deleted

Explanation: A drive marked as containing a tape cartridge is found to be empty. The volume record is deleted from the database.

Variable:

- *vol_id* is the volume record that was deleted.
- *drive_id* is the tape drive that the database indicated contained the cartridge.

Action Required: We recommend that you perform an `audit` of the LSM to reconcile the database with the physical contents of the library.

439 N Unknown packet received, command *command*, identifier *ipc_id*

Explanation: The ACSSA has received a message packet with an IPC identifier not found in the request queue. The ACSSA is unable to process the message.

Variable:

- *command* is the entry in the MESSAGE_HEADER.
- *ipc_id* is the identifier assigned to this message (used to synchronize requests and responses).

Action Required: If the message occurs frequently, use the following procedure to shut down and restart the library server software at your earliest convenience:

1. From a Command Processor window, issue an idle request to place the library server in a quiescent state.
2. Login as the acsss user, and shut down the library server using the kill.acsss utility.
3. Restart the library server using the rc.acsss utility.

441 N cl_ipc_read() byte count < sizeof(REQUEST_HEADER) = *bytes*

Explanation: An internal ACSLS failure occurred.

Variable: *bytes* is the number of bytes read before the failure.

Action Required: If the error recurs, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

485 N `ipc_read: shared_block_read failed, errno = error_no`

Explanation: An internal ACSLS failure occurred.

Variable: *error_no* describes the failure.

Action Required: If the error recurs, collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

486 N `cl_ipc_read: accept() failed, errno + error_no`

Explanation: While establishing communication between ACSLS processes, the receiving side was unable to accept an incoming connection from the sending side.

Variable: `error_no` is the error code returned from the system call to accept().

Action Required: None. Additional messages in the Event Log may report a failure in inter–process communication (IPC). If this problem recurs, collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

487 N `cl_ipc_read: invalid byte_count detected`

Explanation: A packet that appeared to contain invalid data was received during communication between ACSLS processes.

Action Required: None. Additional messages in the event log may report a failure in inter–process communication (IPC). If this problem recurs, collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

528 N Invalid type *type identifier*

Explanation: The type identifier is in the wrong format or has an invalid value.

Variable: *type identifier* refers to an invalid type of identifier used by the operator across the network or ACSLS.

Action Required: Enter the correct format (see "Component Types and Identifiers" in the "General Command Syntax" section of "Chapter 13: Command Reference" of the *ACSLS Installation, Configuration, and Administration Guide*) and/or the correct identifier value.

530 N Invalid tag count file=*number1* vs. code=*number2*

Explanation: An incorrect number of entries was found in the dynamic variables file.

Variable:

- *number1* is the number of entries found in the file.
- *number2* is the number of entries expected by ACSLS.

Action Required:

- Log in as acsss.
- run: dv_print > *filename*.
- Save the dynamic variables file for StorageTek Software Support.
- Collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

536 N `cl_ipc_read: read() failed, errno = error_no`

Explanation: The receiving side was unable to successfully read input from the sending side during communication between ACSLS processes.

Variable: `errorno` is the error code returned from the system call to read ().

Action Required: None. Additional messages in the Event Log may report a failure in inter–process communication (IPC). If this problem recurs, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

546 N `LH error type = *status*`

Explanation: This message indicates that ACSLS has received an abnormal status code from the library hardware.

Variable: *`status`* is the code being passed between functions.

Action Required: Observe the accompanying LH error type to determine the root cause of this message.

713 E `EXEC SQL unable to delete volume *vol_id* because of database error`

Explanation: ACSLS could not find a volume in the library and attempted to mark it deleted, but the ACSLS database interface returned an unusual status to the volumetable update. The database update failed.

Variable: *`vol_id`* identifies the absent volume.

Action Required:

1. Stop ACSLS (**kill.acsss**).
2. Stop the database (**db_command stop**).
3. Kill any hanging ACSLS processes.
4. Restart ACSLS (one time).

5. If the problem persists, you need the help of ACSLS software support to verify that the table volumetable exists and that the “acsss” user has the proper permissions to update it. Collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

886 N byte count(*byte_count*) too small for min packet size(*min_size*) ignored

Explanation: The ACSLM has received a message that is too small from a CSI or the ACSSA. The ACSLM did not attempt to interpret the message because it did not have enough information. This could be a problem with either the network or the software.

Variable:

- *byte_count* is the number of bytes in the message.
- *min_size* is the minimum size of a valid, readable message.

Action Required:

- Make sure the problem is not caused by the network or an ACSAPI client.
- If the problem is not a network or ACSAPI client problem collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this

ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

890 N Severe Error (*status*), Exiting to ACSSS

Explanation: The ACSLM has encountered a fatal error, such as a database failure or an inconsistency in the library configuration. The ACSLM will automatically initiate recovery processing if it is able. If recovery fails, and if you determine that the problem is not being caused by your network or by your ACS API client software, collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.. If recovery completes with a recovery incomplete status, there is no need to call; however, you should `audit` the libraries at your earliest convenience.

Variable: *status* is a message indicating the nature of the severe error.

Action Required: Check previous Event Log entries to determine the cause of the failure. Follow the suggested action for the associated message(s).

923 N Drive *drive_id* lookup failed.

Explanation: While performing Cartridge Recovery, a volume record was encountered with a status that indicated a drive association (e.g., in drive, mount or dismount activity). No record was found in the database for the drive that was recorded in the volume record.

Variable: *drive_id* is the specific drive identifier that was recorded in the volume record.

Action Required: None. Cartridge Recovery proceeds as if no drive were recorded for the volume.

928 N XDR message translation failure

Explanation: During a translation of a packet of data from one version (1, 2, 3, or 4 packet) to another version, the XDR (external data representation) translator detected an error.

Action Required:

1. Reboot the server system and see if the problem persists.
2. If it does, contact Central Software Support (CSS) with a CSI trace during the failure and the full event log during the CSI tracing.

935 N Initiation Started

Explanation: CSI initiation has been started.

Action Required: None. This message is informational only.

936 N Creation of connect queue failed

Explanation: The call to the `cl_qm_init()` or `cl_qm_create()` common library function has failed while trying to create the internal SSI address connection queue.

Action Required: Restart ACSLS by doing the following:

1. From a Command Processor window, issue an `idle` request to place the library server in a quiescent state.
2. Login as the `acsss` user, and shut down the library server using the `kill.acsss` utility.
3. Restart the library server using the `rc.acsss` utility.
4. If the error recurs, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

937 N Creation of network output queue failed

Explanation: The CSI was unable to create the network output queue which is used for messages between the CSI and the SSI.

Action Required: Collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

938 N Initiation completed

Explanation: The specified process has completed initiation procedures.

Action Required: None. This message is informational only.

941 N Undefined message detected: discarded

Explanation: The CSI has encountered a message from the ACSLM or the Network Interface (NI) that cannot be delivered because of incorrect message format or a CSI failure. The message is discarded.

Action Required: If the error recurs, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

943 N Can't delete Q-id *queue_id*, Member: *member_id*

Explanation: The CSI is unable to delete a message in an internal queue.

Variable:

- *queue_id* is the identifier of the CSI connection queue.
- *member_id* is the identifier of the queue member it is trying to delete.

Action Required: If the error recurs, collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

945 N Invalid communications service

Explanation: This entry may indicate that neither environment variable for the two available communication services has been defined. These variables are CSI_TCP_RPCSERVICE and CSI_UDP_RPCSERVICE, which can be defined through acsss_config. See "Chapter 6: Configuring Your Library Hardware" in the *ACSLS Installation, Configuration, and Administration Guide* for information about using acsss_config. This message may also indicate that a request received from the SSI has incorrect values specified in the protocol-dependent portions of the CSI_HEADER.

Variable:

- CSI_TCP_RPCSERVICE is the TCP communication service variable.
- CSI_UDP_RPCSERVICE is the UDP communication service variable.
- acsss_config is the program used to configure your ACSLS environment.
- CSI_HEADER is the variable that specifies CSI protocols and values.

Action Required:

- Make sure that your communication service has been defined using `acsss_config`.
- If the problem still occurs, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

947 N `Cannot send message` *`message`*`: discarded`

Explanation: The CSI is unable to communicate with a client. The CSI discards the message after the appropriate number of retries with timeouts.

Action Required: Collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

948 N `Can't get queue status Errno:` *`error_no`* `Q-id:` *`queue_id`*`,` `Member:` *`member_id`*

Explanation: The CSI is unable to get status information.

Variable:

- `error_no` is the system error number.
- *`queue_id`* is the identifier of the CSI connection queue.
- *`member_id`* is the identifier of the queue member for which the CSI is seeking status information.

Action Required: Collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

949 N Queue cleanup Q-id: *queue_id*.
Member: *member_id* removed.

Explanation: The CSI has begun the process of purging old processes from its connection queue. The CSI routinely searches for processes older than CSI_CONNECT_AGETIME and purges them.

Variable:

- *queue_id* is the identifier of the CSI connection queue.
- *member_id* is the identifier of the queue member it is trying to delete.

Action Required: None; this message is informational only.

950 N Can't locate queue Q-id: *queue_id*, Member: *member_id*

Explanation: The CSI is unable to find a specific member in an internal queue.

Variable:

- *queue_id* is the identifier of the CSI connection queue.
- *member_id* is the identifier of the queue member it is trying to locate.

Action Required: No action is required if the queue member is dropped because it is older than the connection queue aging time (defined by the CSI_CONNECT_AGETIME environment variable). If this error occurs before connection queue aging time has elapsed, however, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

951 N Queue creation failure

Explanation: The CSI is unable to create its connection queue.

Action Required:

1. Restart ACSLS.
2. If the error recurs, collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

952 N Can't add member to queue Q-id: *queue_id*

Explanation: The CSI was unable to put a client's return address on its queue.

Variable: *queue_id* is the identifier of the CSI connection queue.

Action Required: If the error recurs, collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

953 N Invalid procedure number

Explanation: A program is trying to use the CSI, but the program is not using one of the two valid procedure numbers. This is a programming error in the client application.

Action Required: If the error recurs, collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

954 N Unsupported module type *module_type* detected:discarded

Explanation: The ACSLM detected a request with an IPC_HEADER *module_type* not set to TYPE_CSI or TYPE_SA. The ACSLM will only process requests received from a client application through the CSI, or from a user through the ACSSA.

Variable: *module_type* is the invalid entry.

Action Required: Collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

955 N RPC TCP client connection failed, *rpc_error_msg* Errno = *error_no* Remote Internet address: *internet_add*, Port: *port_id*

Explanation: The attempted TCP connection is not possible. This is an error in the client system network.

Variable:

- *rpc_error_msg* is a detailed error message generated by the RPC service itself. In most cases, this message will be Program number not registered, which indicates that either the CSI or the SSI is not running.
- *error_no* is the system error number.
- *Internet_add* is the address of the client machine to which the reply is sent.
- *port_id* is the port identifier.

Action Required: Collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

956 N RPC_UDP client connection failed, *rpc_error_msg*, Remote Internet address: *Internet_add*, Port: *port*

Explanation: The attempted UDP connection is not possible.

Variable:

- *rpc_error_msg* is a detailed error message generated by the RPC service itself. In most cases, this message will be Program number not registered, which indicates that the CSI or SSI is not running.
- *Internet_add* is the address of the client host, expressed as an unsigned long integer.
- *port* is the port number of the client where a connection was attempted.

Action Required: Collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

957 N Invalid network protocol

Explanation: An unsupported network protocol has been passed. This is a programming error in the client SSI.

Action Required: Collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

960 N Cannot reply to RPC message

Explanation: The CSI is unable to reply to an RPC message because the call to the svc_sendreply() function failed. This is an error in the client system network. See the Sun network programming manual.

Action Required: Collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

964 N Unmapped previously registered RPC service.

Explanation: The CSI has been initiated. It notifies you that an RPC number previously assigned to the CSI still exists. The CSI unmaps this number and `svctcp_create()` remaps to a new one as a normal part of the initiation.

Action Required: None; this message is informational only.

965 N Create of RPC TCP service failed

Explanation: The RPC call to the svctcp_create() function has failed.

Action Required: Collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

966 N Can't register RPC TCP service

Explanation: The call to the `svc_register()` function failed.

Action Required: Collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support. See the Sun network programming manual, *Remote Procedure Call Programming Guide*.

967 N Create of RPC UDP service failed

Explanation: The RPC call to the `svctcp_create()` function failed.

Action Required: Collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

968 N `Can't register RPC UDP service`

Explanation: The call to the `svc_register()` function failed.

Action Required: Collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

969 N `Termination Started`

Explanation: CSI termination has been started.

Action Required: None; this message is informational only.

970 N `Termination Completed`

Explanation: CSI termination has been completed successfully.

Action Required: None; this message is informational only.

971 N `LH error type = LH_ERR_TRANSPORT_BUSY` *`drive_id`*

Explanation: The identified drive is busy.

Variable: *`drive_id`* identifies the busy drive.

Action Required: None; this message is informational only.

975 N `Invalid command`

Explanation: The CSI received a request packet from the SSI with an unrecognizable command specified in the `MESSAGE_HEADER` portion of the `CSI_REQUEST_HEADER`.

Action Required:

- Contact a representative of your ACSAPI client support organization.
- Collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this

ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

976 N `Invalid location type`

Explanation: The CSI received a request packet from the SSI with an unrecognizable type specified in the *`message_data`* portion of the request.

Action Required:

- Contact a representative of your ACSAPI client support organization.
- Collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

977 N `Invalid type`

Explanation: The CSI received a packet from the NI with either an unrecognizable `TYPE` in the `IPC_HEADER` portion of the `CSI_REQUEST_HEADER` or an unrecognizable `IDENTIFIER` *`type`* in the message packet.

Action Required:

- Contact a representative of your ACSAPI client support organization.
- Collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

980 N Cannot read message from ACSLM: discarded

Explanation: The CSI detected a message from the ACSLM but is unable to read it.

Action Required: Collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

981 N Operating system error *error_no*

Explanation: The CSI encountered an operating system error. This message is indicative of a problem with the operating system itself, not with the CSI or the library server.

Variable: *error_no* is the system error number; see your Sun OS documentation for a description.

Action Required: Collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

982 N Duplicate packet from ACSLM detected:discarded

Explanation: The CSI has received a duplicate IPC packet. It automatically drops the duplicate packet.

Action Required: If the error recurs, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

1005 N Insufficient packet size = *bytes*

Explanation: An internal ACSLS failure occurred.

Variable: *bytes* is the packet size.

Action Required: If the error recurs, collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

1006 N line *line_number*, Unknown packet received, command = *command*

Explanation: The ACSLM (library manager process) has received an unexpected IPC packet from another ACSLS process. This typically occurs when commands are cancelled because an outstanding request process (associated with the command) may still send packets back to the ACSLM before the request/command is completely cleaned up.

Variable:

- *line_number* is the location in the ACSLS code where the error was detected.
- *command* is the type of ACSLS command packet received.

Action Required: None; this message is informational only.

1017 N CAP *cap_id*: Enter succeeded *status*

Explanation: An enter operation was successful.

Variable:

- *cap_id* is the identifier of the CAP.
- *status* is the final status code of the `enter` command.

Action Required: None; this message is informational only.

1021 N Initiation of CSI Failed

Explanation: CSI initiation failed.

Action Required: Collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

1022 N Cannot send message to NI:discarded, *failure_msg.* Errno = *error_no* (none)Remote Internet address: *Internet_add* Port: *port_id*

Explanation: The NI's communications mechanism is unable to accept a message from the CSI. The CSI discards the message after the appropriate number of retries with timeouts.

Variable:

- *failure_msg.* is the message text identifying the cause of the failure.
- *error_no* is the system error number.
- *Internet_add* is the address of the client host, expressed as an unsigned long integer.
- *port_id* is the port identifier.

Action Required: See the corresponding *failure_msg.* description for an explanation and suggested action. Collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

1024 N Cannot send message to NI:discarded *status* Errno = *error_no* Remote Internet Address: *Internet_add* Port: *port_id*

Explanation: The ACSLS server was unable to reply to a client, and has exhausted its retry attempts. The reply packet will be discarded.

Variable:

- *status* is the final status code of the function.
- *error_no* is the system error number associated with the failure (which may not be meaningful to the ACSLS error).
- *Internet_add* is the address of the client machine to which the reply is sent.
- *port_id* is the client machine port to which the reply is sent.

Action Required: If client/server communications and requests are not being affected, no action is necessary. If those communications/requests are being adversely affected, StorageTek recommends that you do the following:

- First, have your network personnel determine if either the local net or traffic on that net is causing the problem.
- If the local net is not the cause, contact your client system software provider for help in determining why the client is not accepting response packets from the server.

1025 N Unexpected signal caught, value: *signal*

Explanation: The CSI received a signal that it did not expect.

Variable: *signal* is the signal value that the CSI has received.

Action Required: Collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

1026 N Dropping from Queue: Remote Internet Address: *Internet_add* Port: *port_id* ssi_identifier: *ssid* Protocol: *protocol_type* Connect type: *connection_type*

Explanation: The ACSLS server was unable to reply to a client, and has exhausted its retry attempts. The reply packet will be discarded.

Variable:

- *Internet_add* is the address of the client machine to which the reply is sent.
- *port_id* is the client machine port to which the reply is sent.
- *ssid* is the identifier associated with the client–side network interface.
- *protocol_type* is the network protocol being used.
- *connection_type* is the network connect type.

Action Required: If client/server communications and requests are not being affected, no action is necessary. If those communications/requests are being adversely affected, StorageTek recommends that you do the following:

- First, have your network personnel determine if either the local net or traffic on that net is causing the problem.
- If the local net is not the cause, contact your client system software provider for help in determining why the client is not accepting response packets from the server.

1052 I Volume *vol_id* missing, home cell was *cell_id*, drive was *drive_id*, unable to examine

Explanation: This tape cartridge was not found where ACSLS expected it, but either the home cell or the drive couldn't be examined during the recovery process. The volume record will remain in the database until ACSLS can examine all recorded locations for the cartridge and determine that it is not in any of these locations.

Variable:

- *vol_id* is the volume identifier of the missing cartridge.
- *cell_id* is the storage cell location for this cartridge recorded in the database.
- *drive_id* is the tape drive containing this cartridge, as recorded in the database, or none.
- *location* identifies the cell, drive, or cell and drive that ACSLS could not examine.

Action Required: No action is required. The cartridge is recorded as being in a home cell or a drive that cannot be examined now. ACSLS will attempt to recover the cartridge when the LSM comes online or the drive is ready and communicating with the library. If ACSLS does not find the cartridge, the customer may perform an audit of the ACS to locate lost volumes.

1053 I Volume *vol_id* was not found and will be deleted

Explanation: This tape cartridge's volume record is deleted from the database.

Variable: *vol_id* is the volume identifier of the missing cartridge.

Action Required: No action is required.

1054 I Volume *vol_id* deleted, home cell was *cell_id*, drive was *drive_id*

Explanation: This tape cartridge's volume record is deleted from the database

Variable:

- is the volume identifier of the missing cartridge.
- *cell_id* was the storage cell location for this cartridge recorded in the database.
- *drive_id* was the tape drive containing this cartridge, as recorded in the database, or none.

Action Required: No action is required. The customer may perform an audit of the ACS to locate lost volumes.

1139 W ACS: *acs_id* port: *port_id* Parity error

Explanation: A parity error occurred in communications between the ACSLS server and the LMU.

Variable:

- *acs_id* is the ACS identifier.
- *port_id* is the identifier of the ACSLS–to–LMU port.

Action Required: None; this message is informational only. if this message recurs often or is adversely affecting completion of library requests, check the ACSLS–to–LMU cable connection.

1141 W ACS: *acs_id* port: *port_id* Read timed out

Explanation: A read timed out in communications between the ACSLS server and the LMU.

Variable:

- *acs_id* is the ACS identifier.
- *port_id* is the identifier of the ACSLS–to–LMU port.

Action Required: None; this message is informational only. if this message recurs often or is adversely affecting completion of library requests, check the ACSLS–to–LMU cable connection.

1145 W ACS: *acs_id* No queue entry found

Explanation: This message indicates that a response was received from the LMU with error status but when ACSLS searched its work queue for the corresponding entry it could not find it. The actual cause is not determinable in this instance but could be as a result of data transmission error between the LMU and ACSLS or possibly a duplicate return message from the LMU.

Variable: *acs_id* is the ACS identifier.

Action Required: If the problem recurs, check the LMU logs for any hardware problems and if necessary obtain an LMU trace to aid your hardware service representative in diagnosing the problem.

1156 N Invalid character received, line = *line_number*

Explanation: A data packet received from the LMU contains an invalid character. Valid characters are A:Z and 0:9.

Variable: *line_number* is the location in the ACSLS code where the error was detected.

Action Required: If the problem persists and the system does not recover, check cable connections between the LMU and the ACSLS server.

1159 W ACS: *acs_id* port: *port_id* Failed to connect, line = *line_number*

Explanation: A connection between the ACSLS server and the LMU failed to establish communications.

Variable:

- *acs_id* is the ACS identifier.
- *port_id* is the identifier of the ACSLS–to–LMU port.
- *line_number* is the location in the ACSLS code where the error was detected.

Action Required: Check the physical connection and cable between the specified port on the ACSLS server and the LMU.

1185 N ACS: *acs_id* port: *port_id* Resetting port, line = *line_number*

Explanation: A communications error occurred between the ACSLS server and the LMU. The port is being reset to attempt to retry communications.

Variable:

- *acs_id* is the ACS identifier.
- *port_id* is the identifier of the ACSLS–to–LMU port.
- *line_number* is the location in the ACSLS code where the error was detected.

Action Required: None, if communications are successfully reestablished. If not, check the physical connections between the ACSLS server and the LMU. Also check the acsss_config setting of the ACS communications port.

1187 N Invalid or unknown media type found in transaction
Unpack LMU Message Transaction

Explanation: The LMU encountered an unknown or invalid media type associated with the object volume of the current library operation.

Action Required: Check the media type character on the physical label of the associated volume. If the media type character is garbled or missing, a new label should be attached to the volume. Multiple instances of this error may point to problems with the robotics vision system.

1292 N Volume *vol_id*: Found in *cell/CAP/drive/recovery*
cell_id/CAP_id/drive_id/cell action

Explanation: This message is issued when a misplaced tape is found in the library.

Variable:

- *vol_id* is the identifier of the volume that was found.
- *cell/CAP/drive/recovery* is the location type where the volume was found.
- *cell_id/CAP_id/drive_id/cell* is the identifier of the location where the volume was found. Note that, in the case of a volume being found in the playground area (*recovery*), only the word *cell*, not the *cell_id*, is output.
- *action* is either added if a volume record was created for it or recovered if this volume already had a volume record.

Action Required: None. This message is informational only.

1377 Messages

The 1377 messages on pages 70 through 74 are LMU-generated and are sent to the Library Handler. The following explanations, variables, and actions apply to all 1377 messages.

1377 N *mod_id mod_ver mod_line function ACS# lh_state error#error_category*: *error_code*

Explanation: 1377 messages indicate an LMU or LSM error or warning.

Variable: *function* refers to:

- LMU error: Co_4400:st_parse_error.
- *ACS#* refers to the LMU that reported the error.
- *lh_state* is the state of the Library Handler when the error was received.
- *error* refers to the error category and error code of the message.
- *error_category* is the component or category in which the error occurred. The categories are the following:
  - CAP procedure error
  - Configuration error
  - Drive error
  - General procedure error
  - LMU hardware error
  - LMU logical error
  - LMU parameter error
  - LSM hardware error

    - LSM logical error
    - LSM robotics error
- *error_code* the given code within an error category.

Action Required: For all 1377 messages, do the following:

1. Read the *error_code* to see if the hardware is in an unexpected state. If it is, correct it. For example, if the LSM is offline, vary it online. If the CAP is open, close it.
2. If the *error_code* describes an error in the LMU or LSM, reissue the command.
3. If the problem persists, contact StorageTek Software Support. For more information, see *Requesting Help from Software Support*.

All 1377 error codes are listed below. Each of the following 1377 messages relates to a particular procedure or library component and is followed by several messages that could appear in that category.

1377 N *mod_id mod_ver mod_line*
function ACS# lh_state error# CAP procedure error:

CAP is not reserved
CAP is already reserved
CAP is in eject mode
CAP is in enter mode
CAP move is active
CAP door is open
CAP catalog is in progress
Cannot unlock CAP, CAP door is not fully latched
Cannot cancel enter on release request
Magazine is not present

1377 N *mod_id mod_ver mod_line*
function ACS# lh_state error# Configuration error:

LSM not in static configuration
Drive does not exist
Illegal cap id
Panel id is not a drive panel

1377 N *mod_id mod_ver mod_line*
function ACS# lh_state error# Drive error:

Drive is not communicating
Drive is not operational
Outstanding request for drive
Drive is allocated
Drive already has a cartridge
Drive is online for diag request
Drive cannot load cartridge
LOAD or UNLOAD in progress

1377 N *mod_id mod_ver mod_line*
function ACS# lh_state error# General procedure error:

LSM is not ready
LSM is in maintenance mode
LSM is offline pending
LSM is offline
Drive is full
LSM path is in maintenance mode
Path rejected due to full PTP deadlock
Bad recovery cartridge VOLSER
Exceeded max concurrent requests
QUIESCE HOST request in progress
Prior QUIESCE HOST overridden
Max VOLSER STATUS already active
CANCEL pending against request
Request cancelled
VOLSER was unexpectedly readable
Unable to read VOLSER
VOLSERs do not match
Cell is full
Cell is empty
Drive is empty
Drive is active
Drive is not rewound
Cartridge is not mounted
Media types do not match
Media types and VOLSERs do not match
Incompatible media/drive type
Incompatible media/cell

1377 N *mod_id mod_ver mod_line*
function ACS# lh_state error# LMU hardware error:

Transmit reject – no LSM at node
Transmit reject – bad LSM ID
Transmit reject – LSM not communicating
Transmit reject – trans error
Transmit reject – no ACK
Transmit reject – no LAN
Transmit reject – no memory
Transmit reject – buffer overflow
Transmit reject – no response
Transmit reject – LSM offline
Transmit reject – CAP Unlock already active
Transmit reject – LMU is standby

1377 N *mod_id mod_ver mod_line*
function ACS# lh_state error# LMU logical error:

Unknown allocation request
Bad qualifier byte 0
Bad qualifier byte 1
Bad qualifier byte 2
LSM is online
Offline pend overridden
Unknown panel type
Internal logical problem detected
Pass-thru port cell full
Pass-thru port cell empty
Full mailbox
Allocation pend timed out
LSM command pend timed out
Connecting LSM path is unavailable for unknown reason

1377 N *mod_id mod_ver mod_line*
function ACS# lh_state error# LMU parameter error:

Bad primary LSM
Bad secondary LSM
Undefined option or modifier
Invalid LSM address
Invalid panel address
Invalid row address
Invalid column address
Invalid drive address
Invalid CAP row address
Invalid CAP column address
No cell at the specified address
Invalid label modifier
Invalid source modifier
Invalid source type
Invalid destination type
Beginning address > end address
VOLSER contains bad characters
Invalid request ID
Invalid transaction length
Invalid host ID
Response contains bad characters
Host ID does not match current
Duplicate sequence number active
Transaction type not "request" or "message acknowledgement"
Invalid request code to cancel

1377 N *mod_id mod_ver mod_line*
function ACS# lh_state error# error_type LSM
hardware error:

LSM did not respond to request
CAP unlock solenoid has overcurrented
Unlock CAP failed
Lock CAP failed
Drive not communicating
Tape unit interface failure
Failed to transfer image

1377 N *mod_id mod_ver mod_line*
function ACS# lh_state error# error_type
LSM logical error:

Wrong LSM in GET response
Expected packet not received
Wrong task ID in response
Wrong function ID in response
Wrong cell address in response
LSM is offline (from LSM)
Bad cell location (from LSM)
Unknown ending status from LSM
LSM returned invalid response
Unexpected or out-of-sequence CAP message
FAILURE ending status
BUSY ending status
Bad command
Bad parameters in command
Bad address type
Bad panel, row or column
Arm currently is reserved
CAP currently is reserved
First Master Pass-Thru-Port reserved
Second Master Pass-Thru-Port reserved
Playground currently is reserved
Drive 0/0 currently is reserved
Drive 0/1 currently is reserved
Drive 0/2 currently is reserved

```
Drive 0/3 currently is reserved
Drive 1/0 currently is reserved
Drive 1/1 currently is reserved
Drive 1/2 currently is reserved
Drive 1/3 currently is reserved
Drive 2/0 currently is reserved
Drive 2/1 currently is reserved
Drive 2/2 currently is reserved
Drive 2/3 currently is reserved
Drive 3/0 currently is reserved
Drive 3/1 currently is reserved
Drive 3/2 currently is reserved
Drive 3/3 currently is reserved
LSM is online
LSM is in maintenance mode
LSM is offline
LSM access door is open
LSM is not initialized
Cell location does not exist
Hand is full
Hand is empty
Drive is full
CAP door is currently unlocked
Can't unlock CAP in idle mode
CAP door is open
CAP door is already locked
CAP is already in idle mode
CAP is already in eject mode
CAP is already in enter mode
CAP is in enter mode, can't eject
CAP is in eject mode, can't enter
CAP door is not locked for idle
Invalid drive panel address
No drive installed at address
Invalid drive command specifier
Drive is in motion
Unable to rewind drive
Unable to unload drive
Drive cannot honor write protect
Drive currently reserved
```

1377 N *mod_id mod_ver mod_line*
function ACS# lh_state error# LSM robotics error:

Arm is not operational
Hand is not operational
PTP is not operational
PTP does not exist
CAP is not operational
Elements not operational
Failed robotics portion of MOVE
Bad PUT
Bad GET
Bad REACH retraction
Bad REACH extension
error positioning PTP
No hands are operational
Drive didn't detect cartridge on PUT
Failed targeting portion of MOVE
REACH is in an unsafe position
Failure on recalibration of cell

1392 N LSM *lsm_id* offline

Explanation: The LSM is offline and is therefore unavailable for entering tape cartridges. If this message is logged during `enter` processing, the message means the LSM was varied offline with the `force` option while its CAP was being used for the `enter`.

Variable: *lsm_id* is the identifier of the LSM.

Action Required: Vary the LSM online, then reissue the `enter` request.

1406 N Transport failure *drive_id*

Explanation: A hardware failure occurred in the specified transport.

Variable: *drive_id* is the transport that failed.

Action Required: Contact hardware support.

1418 N Server system idle.

Explanation: The ACSLM has been placed in the idle state by an operator and is unavailable for requests using library resources.

Action Required: None; this message is informational only.

1419 N Server system running.

Explanation: The ACSLM has been placed in the run state.

Action Required: None; this message is informational only.

1420 N CAP *cap_id*: Cartridges detected in CAP.

Explanation: Cartridges were detected in the CAP during a `vary online` operation or during library server initiation or recovery.

Variable: *cap_id* is the identifier of the CAP.

Action Required: Issue an `enter` request to unlock the designated CAP, then remove the cartridges from the CAP.

1421 N Drive *drive_id*: Clean drive.

Explanation: The specified drive needs to be cleaned.

Variable: *drive_id* is the identifier of the library drive.

Action Required: If Auto Clean is `FALSE`, mount a cleaning cartridge in the designated drive. If Auto Clean is `TRUE`, this message is informational only; the drive will be cleaned automatically prior to the next mount of the drive. For more information about cleaning cartridges, see Chapter of *ACSLS Administrator's Guide*.

1422 N `Library configuration error.`

Explanation: The library configuration specified in the database is not the same as the one defined in the LMU, or a component appears in the database, but fails to respond to LMU commands. This error causes the library server to terminate.

Action Required: Rerun `acsss_config`. Then run an audit. See "Chapter 6: Configuring Your Library Hardware" in the *ACSLS Installation, Configuration, and Administration Guide* for information about `acsss_config` and running an audit.

1423 N `Data base failure.`

Explanation: An ACSLS process is unable to access the database. A database error code, indicating the reason for the failure, will also be written to the Event Log.

Action Required:

- Gather Informix database information (see "Diagnostic Information for Informix Database–Related Error Messages" on page five (5).
- Collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

1427 N `Event log is full.`

Explanation: The Event Log has reached the maximum size defined in the library server installation. Messages will continue to be added to the Event Log, but this message will be logged at one-minute intervals until you reduce the size of the log.

Action Required: If you wish to keep a copy of the current Event Log for archiving purposes, move it to another directory. The Event Logger will automatically create a new file when it logs the next message. For information on managing the Event Log, see "Chapter 11: Reporting and Logging" in the *ACSLS Installation, Configuration, and Administration Guide.*

1428 N `Server system idle is pending.`

Explanation: The ACSLM is in an idle-pending state and is therefore unavailable for requests using library resources.

Action Required: None; this message is informational only.

1429 N `CAP` *`cap_id`*`: Place cartridges in CAP.`

Explanation: The specified CAP is ready to receive cartridges, as part of an `enter` operation. This message is repeated at approximately two-minute intervals until the CAP door is opened.

Variable: *`cap_id`* is the identifier of the CAP.

Action Required: Open the designated CAP door and place the cartridges in the CAP.

1430 N `IPC failure on socket` *`socket_id`*`.`

Explanation: The ACSLM or ACSSA cannot communicate with another library server software component.

Variable: *`socket_id`* is the identifier of the failing socket.

Action Required: If you did *not* issue an `idle force` command *and* the problem recurs, shut down and restart the library server software. Use the following procedure:

1. From a `cmd_proc` window, issue an `idle` request to place the library server in a quiescent state.
2. Log in as the `acsss` user, and shut down the library server using the `kill.acsss` utility.
3. Restart the library server using the `rc.acsss` utility.
4. If the problem continues, report the error to software support. Collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

1431 N port *port_id*: Library error, *error_type*

Explanation: An error in the library hardware has been reported to ACSLS.

Variable:

- *port_id* is the identifier of the ACSLS–to–LMU port.
- *error_type* is the error received by the ACSLS server from the library (via the LMU).

Action Required: Report the error to your Customer Services Engineer (CSE) by calling 1-800- 525-0369. The CSE should check the library and related hardware components to determine the cause of the library failure.

1432 N Server System network interface timeout.

Explanation: Due to lack of client response, a timeout has occurred during network data handling. Data such as earlier requests you put in or system responses may have been lost.

Action Required:

1. Check the network connections on both the server system and the client system.

   If these are intact, the error may be due to network activity or momentary load.

2. If the error persists, verify network operations.

1433 N *component component_id*: Offline

Explanation: The specified component was varied offline.

Variable:

- *component* is the library component (for example, ACS).
- *component_id* is the identifier of the library component.

Action Required: None; this message is informational only.

1434 N *component component_Id*: Online

Explanation: The specified component was varied online.

Variable:

- *component* is the library component (for example, ACS).
- *component_id* is the identifier of the library component.

Action Required: None; this message is informational only.

1435 N Software process failure.

Explanation: A library request process failed. This may be due to either an error in request processing or an unexpected process termination. This error can be ignored if you just issued an idle force command.

Action Required: Retry the command and see if you get the same error. If you do, shut down and restart ACSLS:

1. From a Command Processor window, issue an `idle` request to place the library server in a quiescent state.
2. Log in as the `acsss` user, and shut down the library server using the `kill.acsss` utility.
3. Restart the library server using the `rc.acsss` utility.
4. We recommend that you perform an `audit` to reconcile the database with the physical contents of the library.

1436 N Server system recovery complete.

Explanation: Library server recovery completed successfully.

Action Required: None; this message is informational only.

1437 N `Server system recovery failed.`

Explanation: Library server recovery failed.

Action Required: Check previous Event Log entries for additional information about the failure. Follow the suggested action for the associated error message(s).

1438 N `LSM` *`lsm_id`*`: In-transit cartridge recovery incomplete.`

Explanation: The specified LSM failed to recover all in-transit cartridges during library server recovery.

Variable: *`lsm_id`* is the identifier of the LSM containing the in-transit cartridges.

Action Required:

1. Query the LSM to make sure there are empty cells in the LSM.
2. If there are not empty cells in the LSM, eject cartridges to free cell space. See “Chapter 9: Cartridge Management” in the *ACSLS Installation, Configuration, and Administration Guide* for information about ejecting cartridges.
3. Ensure that the CAP in the specified LSM is empty.
4. Vary the LSM offline, and then back online to attempt in-transit cartridge recovery.
5. If this process is unsuccessful, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

1439 N `Server system recovery started.`

Explanation: Library server recovery has been initiated.

Action Required: None; this message is informational only.

1440 N CAP *cap_id*: Remove cartridges from CAP.

Explanation: The specified CAP contains cartridges and is ready for the operator to remove them. This message is repeated at approximately two-minute intervals until the CAP door is opened.

Variable: *cap_id* is the identifier of the CAP.

Action Required: Open the designated CAP door and remove the cartridges.

1441 N Server system network interface failure.

Explanation: The CSI has encountered a Remote Procedure Call (RPC) failure. Data such as earlier requests you put in or system responses may have been lost.

Action Required: Check previous Event Log entries for additional information about the failure. Follow the suggested action for the associated error message(s).

1442 N Pool *pool_id*: high water mark warning.

Explanation: The number of volumes in the specified scratch pool is greater than or equal to the high water mark.

Variable: *pool_id* is the pool identifier.

Action Required: None; this message is informational only. Unless cartridges are used from the pool or the high water mark threshold is reset, this message will be repeated when a volume is added to the specified scratch pool. See “Chapter 9: Cartridge Management” in the *ACSLS Installation, Configuration, and Administration Guide* for information on managing scratch pools.

1443 N Pool *pool_id*: low water mark warning.

Explanation: The number of volumes in the specified scratch pool is less than or equal to the low water mark.

Variable: *pool_id* is the pool identifier.

Action Required: Follow your company's procedures for adding scratch volumes unless it is not a problem to run out of scratch volumes. See "Chapter 9: Cartridge Management" in the *ACSLS Installation, Configuration, and Administration Guide* for information on managing scratch pools.

1444 N CAP *cap_id*: No CAP available, waiting...

Explanation: Audit processng has completed, but a CAP is not available for ejecting cartridges.

Variable: The *cap_id* indicates which ACS does not have a CAP available.

Action Required: None. When a CAP is available, the cartridges will be ejected.

1445 N Drive *drive_id*: Cleaned.

Explanation: The specified drive has been cleaned.

Variable: *drive_id* is the identifier of the library drive.

Action Required: None; this message is informational only.

1446 N CAP *CAP_id*: CAP door is open.

Explanation: The CAP door has been opened.

Variable:

- *lsm_id* is the LSM whose CAP door is open.
- *CAP_id* is the identifier of the CAP whose door is open.

Action Required: None; this message is informational only.

1448 N *filesystem:* Disk usage of *current%* pct exceeds limit of *limit%* pct.

Explanation: The available disk space in the indicated file system is about to run out. Appearance of this message is usually indicative of either:

- the Event Log filling up disk space because it has not been periodically reset
- the database journal files are filling up disk space because a database backup has not been periodically done.

Variable:

- *filesystem* is the name of the disk subsystem that is about to run out of space.
- *current* is the current percentage of disk space used in the filesystem.
- *limit*is the disk threshold above which this message is periodically issued.

Action Required: Take the following actions to free up disk space.

1. See “ACSLS Event Log” in “Appendix B: Troubleshooting” in the *ACSLS Installation, Configuration, and Administration Guide* for information about managing the Event Log size and rollover files.
2. See “Chapter 10: Database Backup and Restore” of the *ACSLS Installation, Configuration, and Administration Guide* for information about database backups and managing database redo log files.

1450 N Volume identifier *vol_id* deleted

Explanation: The specified volume identifier has been removed from the ACSLS database. This typically occurs when volumes are ejected from the library. It may also occur when the specified volume is not found where it should be located (for example, because it was manually removed from the library).

Variable: *vol_id* is the volume identifier of the volume that was deleted.

Action Required: None. This message is informational only. However, if you believe the volume was deleted in error, then report the error to software support. Collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

1453 N CAP *cap_id*: Enter operation *status*

Explanation: This message shows the status of an enter operation that is either in progress or completed.

Variable:

- *cap_id* is the identifier of the CAP.
- *status* is the current status of the enter operation and the CAP identified in the message.

Action Required: None; this message is informational only.

1463 N Unknown media type detected. Not Entered
Validate volumes placed in CAP

Explanation: The media type of a volume found in the CAP is unknown to ACSLS and the volume will not be entered into the library.

Action Required: Remove the cartridge from the CAP and check the media–type character on the label. Make sure the label is readable and that it is associated with a valid tape device attached to the library. Multiple instances of this error may point to problems with the robotics vision system.

1732 I `ACSLS database recovery successfully completed. Database has been restored to the point of the last backup plus any subsequent transactions recorded on the current disk.`

Explanation: This message indicates that the recovery you ran is completed. The second part of the message can mean that all transactions were recovered *unless* you have the following conditions:

- You do not have a second disk, just a primary disk.
- Your primary disk was damaged and you ran a recovery.

Under these conditions, it is possible that not all transaction files were recovered after running the recovery. Chances are likely that redo logs were not applied since they were corrupted by the same problem that prompted the restore.

If you do have a second disk *or* you have only a primary disk that did not crash, it is likely that all transactions were restored.

Action Required: None.

1820 E `Unable to kill scsilh.im, PID` *`PID`*

Explanation: A scsilh process was still running (scsilh.im) when the product came up. This scsilh.im process must be killed before the product can come up.

Variable: *`PID`* is the process id for the scsilh.im image that is still running.

Action Required:

1. Kill the scsilh.im as `acsss` by running `stopSCSILH.sh`.
2. If `stopSCSILH.sh` does not work when run as `acsss`, run `stopSCSILH.sh` as `root`.
3. If `stopSCSILH.sh` fails when run as `root`, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1

Messages manual). Then contact StorageTek Software Support.

1822 E Killing SCSILH process *PID* with SIGTERM failed on *error_desc*, errno= *error_no*

Explanation: A scsilh.im was still running when the product came up or was shut down. This scsilh.im process must be killed before the product can come up.

Variable:

- *function* is the function that found the error.
- *PID* is the process id of the process to be killed.
- *error_desc* is the Unix error description associated with *error_no* returned by kill.
- *error_no* is the value of the Unix system error number

Action Required:

1. Kill the scsilh.im as `acsss` by running `stopSCSILH.sh`.
2. If `stopSCSILH.sh` does not work when run as `acsss`, run `stopSCSILH.sh` as `root`.
3. If `stopSCSILH.sh` fails when run as `root`, collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

1824 E `Invalid driver_state` *`state`* `for Connect/Vary request ACS` *`ACS_id port_name`*

Explanation: This error message indicates an ACSLS software error.

Variable:

- *`function`* is the function that found the error.
- *`state`* is the state of the driver, of the form STATE_<NAME_OF_STATE>.
- *`ACS_id`* is the identifier of the ACS receiving the request.
- *`port_name`* is the name of the port in the Connect/Vary request.

Action Required: Collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

1826 E `Cleanup of SCSILH failed, rerun stopSCSILH.sh manually, errno` *`error_desc`*

Explanation: An `scsilh` process was still running when the product came up or shut down. This `scsilh` process must be killed before the product can come up.

Variable:

- *`function`* is the function that found the error.
- *`error_desc`* is the Unix error description associated with the errno returned by UNIX, system call, system.

Action Required:

1. Kill the `scsilh` as `acsss` by running `stopSCSILH.sh`.
2. If `stopSCSILH.sh` does not work when run as `acsss`, run `stopSCSILH.sh` as `root`.

3. If stopSCSILH.sh fails when run as root, call your StorageTek Software Support Representative (SSR). See *How to Request Help* for information.

1827 E Cleanup of SCSILH failed, rerun stopSCSILH.sh manually, return code *return_code*

Explanation: A scsilh process was still running when the product came up or shut down. This scsilh process must be killed before the product can come up.

Variable:

- *function* is the function that found the error.
- *return_code* is the return code from the ACSLS shell script stopSCSILH.sh.

Action Required:

1. Kill the scsilh as acsss by running stopSCSILH.sh.
2. If stopSCSILH.sh does not work when run as acsss, run stopSCSILH.sh as root.
3. If stopSCSILH.sh fails when run as root, collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

1828 E ACS *ACS_id:* fork of SCSILH failed errno (*error_no)* *error_desc*

Explanation: The UNIX system call fork had an error.

Variable:

- *function* is the function that found the error.
- *ACS_id* is the ACS identifier.
- *error_no* is the value of the UNIX system error number returned by the UNIX fork system call.
- *error_desc* is the UNIX error description associated with the *error* number returned by UNIX, system call, fork.

Action Required: Restart ACSLS and if the problem persists, collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

1829 E execl (*program*) failed, errno=*error_desc*

Explanation: The UNIX system call execl failed executing *program*.

Variable:

- *function* is the function that found the error.
- *program* – the program that execl tried to execute.
- *error_desc* is the UNIX error description associated with errno returned by the UNIX execl system call.

Action Required: Restart ACSLS and if the problem persists, collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

1830 E `SCSILH did not start, acslh exiting`

Explanation: This message refers to a fatal error in either ACSLS, SCSILH, or the UNIX system. The product will shut down as part of this message.

Variable: *`function`* is the function that found the error.

Action Required: Restart ACSLS. If ACSLS does not restart after three tries, collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

1831 E `return code (`*`return_code`*`) terminated scsilh.im`

Explanation: SCSILH terminated without a signal. If this message occurred during shutdown of ACSLS, it is informational only. Otherwise, see Action Required below.

Variable: *`return_code`* is the code returned by SCSILH.

Action Required: Restart ACSLS. If ACSLS does not restart after three tries, contact collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support. Please have return code available.

1880 E `Drive `*`drive_id`*`: Unable to position on the drive, status: loaded`

Explanation: The drive is loaded. The robot was unable to target on the drive.

Variable: *`drive_id`* is the drive identifier.

Action Required: Drive transport is reporting a problem. This could be due to the drive or to the robot. Do the following:

1. Contact a CSE to have the drive checked for a stuck tape.
2. If there are no problems in the drive, the CSE should check the LMU and LSM error logs for more information.

1907 E `Unable to create bdb EOF file.`

Explanation: An ACSLS utility cannot create a required end-of-file marker.

Action Required: Make sure that the `/tmp` directory has write permission for all users, then rerun the backup.

1908 E `Unable to read files from backup device, dev.`

Explanation: The `rdb.acsss` utility cannot read the backup files from the specified backup device.

Variable: *dev* is the backup device you specified.

Action Required: Rerun the restore operation, specifying a valid device with a valid backup file created by the `bdb.acsss` utility.

1909 E `The backup device dev is not a good bdb backup from ACSLS release Please try again specifying a valid bdb backup.`

Explanation: The `rdb.acsss` utility cannot verify that the specified backup files are valid.

Variable:

- *dev* is the backup device you specified.
- *release* is the ACSLS release you are running.

Action Required: You must restore the database from a backup created by the `bdb.acsss` utility from the same version of ACSLS (*release*) that you are running. Rerun the restore operation, specifying a valid device with a valid backup file created by the *release* version of the `bdb.acsss` utility.

1918 N Too many processes. With the current settings specified through acsss_config, ACSLS requires *no_req_pro* processes to be running simultaneously. Currently, your system limit allows only *sys_limit_no_pro_user* processes per user. Either lower the number of mount processes, persistent query processes, or transient processes, or else raise this system limit.

Explanation: Message is self-explanatory.

Variable:

- *no_req_pro* is the number of required processes.
- *sys_limit_no_pro_user* is the system limit on the number of processes per user.

Action Required: Do one or more of the following:

- Lower the number of persistent query processes through acsss_config
- Lower the number of mount processes through acsss_config
- Lower the maximum number of transient processes through acsss_config
- Raise the maximum allowable number of processes per user. (This is system-dependent.)

1970 W RPtimeout value for *keyword* is not numeric.

Explanation: In the $ACS_HOME/data/internal/RPtimeout file the value for *keyword* was not all numeric data. This message will be followed by message 1974.

Variable: *keyword* represents the operation that has the corresponding timeout value.

Action Required: Collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

1971 W RPtimeout value for *keyword* is not in range.

Explanation: In the $ACS_HOME/data/internal/RPtimeout file the value for *keyword* was not in the range of 1 second to 24 hours. This message will be followed by message 1974. The default value for *keyword* will be used.

Variable: *keyword* represents the operation that has the corresponding timeout value.

Action Required: Collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

1972 W Unable to find *keyword* in RPtimeout file.

Explanation: In the file, ACSLS was unable to find the *keyword*. This message is followed by message 1974, which will give the keyword.

Action Required: Collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

1973 W Unable to open RPtimeout file.

Explanation: ACSLS attempted to open $ACS_HOME/data/internal/RPtimeout, but was unable to do so. The default value will be used. This message is followed by message 1974, giving the *keyword*.

Action Required: Collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

1974 I `Using default timeout value for` *`keyword`*.

Explanation: This message follows message 1970, 1971, 1972, or 1973 to inform you that the default timeout value was used for the LH request type *`keyword`*.

Variable: *`keyword`* represents the operation that has the corresponding timeout value.

Action Required: None. Action applies to the message that preceded this one.

2000 E `Failed to get queue member.`

Explanation: Message was not retrieved from the message queue for removal.

Action Required: Collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2001 E `Don't have read permission.`

Explanation: The CSI does not have read permission on the `csi_ip_switch.dat` file.

Action Required: Use `chmod` to set permissions on the `csc_ip_switch.dat` file for read and write access for the user.

2002 E `Can't open file errno=`*`error_no`*

Explanation: A failure of type *errno* occurred when the `csi_ip_switch.dat` file was attempted to be opened.

Variable: *error_no* is the system error number associated with opening this file.

Action Required: Check that the file `csc_ip_switch.dat` exists and is in the proper location: $ACSLS_HOME/data/internal/client_config/

If both of these conditions are met and the problem still persists, collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support. For more information about managing a dual-LAN client configuration, see "Managing a Dual–Lan Client Configuration" in the "Library Management" chapter of the *ACSLS Installation, Configuration, and Administration Guide.*

2003 E `Invalid entry` *displayed_line* **-** line ignored

Explanation: The line displayed is an invalid entry and the line is ignored.

Variable: *displayed_line* is the invalid line that needs to be corrected.

Action Required: Correct the line displayed and restart ACSLS.

2004 E `Duplicate addresses` *displayed_line* **-** line ignored.

Explanation: Duplicate primary and secondary addresses were entered into the `csc_ip_switch.dat` file.

Variable: *displayed_line* is the invalid line that needs to be corrected.

Action Required: Correct the line displayed and restart ACSLS.

2005 E Max number of (*max_no_allowed*)dual clients exceeded

Explanation: More than the maximum number of allowable dual clients was entered into the csc_ip_switch.dat file. Only the maximum number of dual clients is allowed.

Variable: *max_no_allowed* is the maximum number of allowable dual clients entered into the csc_ip_switch.dat file.

Action Required: Do not exceed the maximum number of allowable dual clients in the csc_ip_switch.dat file, or, if you need more clients, collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2006 E Bad primary addr - bad conversion: *displayed_addr*.

Explanation: The primary address entered into the csc_ip_switch.dat file is not an IP address format.

Variable: *displayed_addr* is the erroneous primary address displayed.

Action Required: Correct the displayed address in the csc_ip_switch.dat file and restart ACSLS.

2007 E Bad primary addr - not digital: *displayed_addr*

Explanation: The primary address entered in the csc_ip_switch.dat file is not an IP address format.

Variable: *displayed_addr* is the erroneous primary address displayed.

Action Required: Correct the displayed address in the csc_ip_switch.dat file and restart ACSLS.

2008 E Bad secondary addr - bad conversion: *displayed_addr*

Explanation: The secondary address entered in the csc_ip_switch.dat file is not an IP address format.

Variable: *displayed_addr* is the erroneous secondary address displayed.

Action Required: Correct the displayed address in the csc_ip_switch.dat file and restart ACSLS.

2009 E Bad secondary addr - not digital: *displayed_addr*

Explanation: The secondary address entered in the csc_ip_switch.dat file is not an IP address format. The address is not digital.

Variable: *displayed_addr* is the erroneous secondary address displayed.

Action Required: Correct the displayed address in the csc_ip_switch.dat file and restart ACSLS.

2010 I *path* opened - DUAL PATH OPTION ACTIVATED.

Explanation: File (csc_ip_switch.dat) was opened and read successfully. Dual path function is activated.

Variable: *path* is the full path to the csc_ip_switch.dat file.

Action Required: None.

2011 E *path* opened - Dual Option Process Failure.

Explanation: A major process failure has occurred when trying to de-queue primary address packets.

Action Required: Collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2012 N LMU error: ACS: *acs_id* Invalid value found in transmission, value = *character*

Explanation: The ACSLS (library handler process) detected an invalid character in the transmission received from the LMU.

Variable:

- *acs_id* is the ACS identifier.
- *character* is the invalid character detected in the transmission.

Action Required: If the request failed, reissue the request.

2014 N LMU error: ACS: *acs_id* Invalid lmu_mode *lmu_mode*.

Explanation: The ACSLS (library handler process) received a response packet from the LMU with an unrecognizable LMU code specified in *lmu_mode*.

Variable:

- *acs_id* is the ACS identifier.
- *lmu_mode* is the LMU mode from which the response was received. The mode is one of the following: master, standby, or standalone.

Action Required: None. This message is informational only.

2018 N LMU error: ACS: *acs_id* Invalid compatibility level *compat_level* line = *line_number*.

Explanation: An invalid LMU compatibility level was detected.

Variable:

- *acs_id* is the ACS identifier.
- *compat_level* is the invalid compatibility level detected.
- *line_number* is the location in the ACSLS code where the error was detected.

Action Required: None. This message is informational only.

2027 N ACS: *acs_id* Switchover Recovery Complete.

Explanation: The ACSLH (library handler process) has completed processing of library requests that were affected by a switch LMU or LMU IPL.

Variable: *acs_id* is the ACS identifier.

Action Required: None. This message is informational only.

2028 N ACS: *acs_id* New Master LMU.

Explanation: The ACSLS (library handler process) has received an unsolicited message from the LMU indicating that there is a new Master LMU.

Variable: *acs_id* is the ACS identifier.

Action Required: None. This message is informational only.

2029 N LMU error: ACS: *acs_id* Invalid lmu_name *lmu_name*.

Explanation: The ACSLS (library handler process) received a packet from the LMU with an unrecognizable LMU name specified in the *lmu_name* portion of the packet.

Variable:

- *acs_id* is the ACS identifier.
- *lmu_name* is the name of the LMU from which the packet was received: A, B, or standalone.

Action Required: None. This message is informational only.

2030 N LMU error: ACS: *acs_id* Invalid standby_status *standby_status*.

Explanation: The ACSLH (library handler process) received a packet from the LMU with an unrecognizable LMU name specified in the *lmu_name* portion of the packet.

Variable:

- *acs_id* is the ACS identifier.
- *standby_status* is the status of the LMU from which the packet

Action Required: None. This message is informational only.

2031 N ACS: *acs_id* Standby LMU now communicating.

Explanation: The standby LMU is communicating to the specified ACS.

Variable: *acs_id* is the ACS identifier.

Action Required: None. This message is informational only.

2032 N ACS: *acs_id* Standby LMU not communicating

Explanation: The ACSLH (library handler process) has received an unsolicited message from the LMU indicating that the Standby LMU is not communicating with the ACSLS server.

Variable: *acs_id* is the ACS identifier.

Action Required: None. This message is informational only.

2034 N ACSLH: Request Recoverer: *message*

Explanation: This message usually displays when a software error occurs during a dual LMU switchover recovery or in the recovery period after a standalone LMU IPLs.

Variable: *message* gives a detailed description of the error.

Action Required: Have the error description from *message* available, and collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2035 N status = *port_status*: Cannot vary last Master port offline, leaving port online.

Explanation: Issuing a vary port offline command to the last online master port is not allowed.

Variable: *port_status* is the status of the port.

Action Required: None. This message is informational only.

2036 N Standalone LMU, cannot initiate switch.

Explanation: Issuing a switch LMU command to a standalone LMU is not allowed.

Action Required: None. This message is informational only.

2037 N Standby LMU not communicating, cannot initiate switch.

Explanation: Issuing a switch LMU command when the standby LMU is not communicating is not allowed.

Action Required: None. This message is informational only.

2038 N ACS *acs_id* has no LSMs configured; you may want to verify hardware configuration.

Explanation: This message may appear in either of the following conditions:

- If you have a dual-LMU configuration and a switchover occurs during `acsss_config`, it is possible to get this message when one of the LMUs IPLs during `acsss_config`.

Variable: *acs_id* is the ACS that has no LSMs configured.

Action Required:

- If you see this message during product configuration, verify all hardware configuration and all hardware connections. These connections include those to the server, from the LMUs to the LSMs, and between the LMUs in a dual-LMU configuration.

  If all hardware connections are correct and `acsss_config` still detects an empty ACS, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

- If this message occurs with an LMU switchover during `acsss_config`, rerun `acsss_config`.

2041 W Could not find text '*text*' in file *filename*

Explanation: Some expected text in the specified file was not found. The file could possibly be corrupted.

Variable: *filename* is the file. *text* is the text that was expected to be in that file.

Action Required: Collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2050 W Error processing command: *command - error*

Explanation: This message occurs when there is an error processing a command received within ACSLS.

Variable:

- *command* The command that caused the error.
- *error* The specific error that occurred.

Action Required: Collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2051 W Ipc error reading command: *error*

Explanation: There was an internal communication error when trying to read a command for processing.

Variable: *error* The error encountered during IPC.

Action Required: Collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2052 W Unable to get value for TRACE_VOLUME dynamic variable

Explanation: There was an error retrieving the value for the TRACE_VOLUME dynamic variable. This will result in possible inconsistent behavior with respect to volume tracing.

Action Required: Collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2053 W Error trying to create volume statistics entry.*error_desc*.

Explanation: There was a problem when trying to create an entry in the LIB_VOL_STSTS file.

Variable: *error_desc* Detailed error message describing the problem.

Action Required: Collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2054 W Move to *cell_id* failed cartridge recovery needed.Volume *vol_id* may be stuck intransit.

Explanation: Volume is stranded inside the LSM somewhere between its original source and destination.

Variable:

- *cell_id* Destination cell address.
- *vol_id* Volume identifier of stuck volume.

Action Required: Do either of the following:

- Manually remove tape from LSM then audit its cell and enter it.
- Vary offline force the LSM the volume is in, then vary the LSM online to force intransit recovery.

2055 W Error updating cell *cell_id* state to full.

Explanation: There was an error in setting a dell's state to full. This may have resulted in an inconsistent ACSLS database.

Variable: *cell_id* Cell address that had the error.

Action Required: Perform a subpanel audit of cell indicated to attempt to reconcile database.

2056 W Error update cell *cell_id* state to empty.

Explanation: There was an error in setting a cell's state to empty. This may have resulted in an inconsistent ACSLS database.

Variable: *cell_id* Cell address that had the error.

Action Required: Perform a subpanel audit of cell indicated to attempt to reconcile database.

2057 W Error update cell *cell_id* state to reserved.

Explanation: There was an error in setting a cell's state to empty. This may have resulted in an inconsistent ACSLS database.

Variable: *cell_id* Cell address that had the error.

Action Required: Perform a subpanel audit of cell indicated to attempt to reconcile database.

2058 W Idle command failed *information*.

Explanation: An attempt to idle a portion of the ACSLS server failed.

Variable: *information* Detailed information about failure.

Action Required: The server will still be functional but you should report the problem as it may be a symptom of a larger problem. Collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2059 W Failed to close accept socket. Error: *error*

Explanation: There was an error when attempting to close an internal ACSLS communication mechanism.

Variable: *error* The error that caused failure.

Action Required: This error could indicate a one-time anomaly or it could be a symptom of a bigger, underlying problem. If this message appears one time with no other error messages, then it can be ignored. If it appears multiple times or with other error messages, then collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2060 W Database Error: *error*

Explanation: There was an error processing a transaction with the database used by ACSLS.

Variable: *error* The specific error that occurred with the database.

Action Required: Collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2061 W Invalid data found in command: *information*

Explanation: ACSLS detected some invalid data in an internal command structure.

Variable: *information* Detailed description of invalid data.

Action Required: Collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2062 W Unexpected ACSLH result received by move: *information*

Explanation: An internal error occurred in the communication between ACSLS components.

Variable: *information* Detailed description of the unexpected result.

Action Required: Collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2063 E Internal error in processing the move command: *information*

Explanation: An internal error occurred while processing a move request.

Variable: *information* Detailed information about the error.

Action Required: Collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2064 E Error getting LIB_VOL_STATS value: *explanation*.

Explanation: ACSLS was unable to read the value for the LIB_VOL_STATS dynamic variable. This may result in a failure to log volume statistic entries.

Variable: *explanation* Detailed information about the error.

Action Required: Rerun acsss_config to attempt to turn on LIB_VOL_STATS and then attempt the request again. If the error persists, then collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2065 E Error creating record for Volume *vol_id*: *information*.

Explanation: An internal error occurred while attempting to update the ACSLS internal database record for the given *vol_id*.

Variable:

- *vol_id* Volume identifier of the volume that failed to create.
- *information* Detailed information about the error.

Action Required: Attempt to audit the expected location of the volume. If that fails, then collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2066 E Unable to update status for Volume *vol_id*: *information*.

Explanation: An internal error occurred while attempting to update the ACSLS internal database record for the given *vol_id*.

Variable:

- *vol_id* Volume identifier of volume that failed to create.
- *information* Detailed information about the error.

Action Required: Attempt to audit the expected location of the volume. If that fails, then collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2068 N move: volume (*vol_id*) not found in cell (*%s*), deleted.

Explanation: When attempting to move a volume, the volume was not found in its home cell. The volume record is deleted from the database

Variable:

- *vol_id* Volume identifier of the volume that was not found.
- *cell_id* Cell location.

Action Required: Audit the LSM to reconcile the ACSLS database with the contents of the LSM.

2069 N cl_vol_write failed: (*vol_id*)\n

Explanation: The process failed to update the volume record in the database.

Variable: (*vol_id*)is the volume id for the volume record that failed to be updated in the database.

Action Required: Display the volume. Collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2079 I `Sending first response to client %s.`

Explanation: The first response that is sent to a network client is displayed. The substitution variable (%s) is the IP address.

Action Required: None. This is an informational message.

2088 E `Unable to shift transaction log file on secondary disk.`

Explanation: The secondary disk manager is unable to create the transaction log file on the secondary disk. This is a database error.

Variable: None.

Action Required: Rerun the secondary disk manager (`sd_mgr.sh`).

2107 N `Cannot allocate environment handle.`

Explanation: The ODBC call to allocate the environment handle has failed.

Variable: None.

Action Required: The application has to be re-started; or contact your System Administrator.

2108 N `Cannot allocate database handle.`

Explanation: The ODBC call to allocate the database handle has failed.

Variable: None.

Action Required: The application has to be re-started. Contact your System Administrator.

2109 N Cannot allocate statement handle.

Explanation: The ODBC call to allocate the SQL statement handle has failed.

Variable: None.

Action Required: The application has to be re-started. Contact your System Administrator.

2111 N Cannot free connection handle.

Explanation: The ODBC call to free database connection handle has failed.

Variable: None.

Action Required: None.

2112 N Cannot free environment handle

Explanation: The ODBC call to free the environment handle has failed.

Variable: None.

Action Required: None.

2113 N Cannot fetch. Return code *return_code*

Explanation: The ODBC call to fetch a row from the query result set has failed.

Variable: *return_code* The error code number returned by ODBC.

Action Required: The application has to be re-run. Contact your System Administrator.

2114 N Error in preparing statement

Explanation: The ODBC call to prepare an SQL statement for execution has failed.

Variable: None.

Action Required: The application has to be re-run. Contact your System Administrator.

2115 N Cannot reset auto commit option

Explanation: The ODBC call to set/reset the automatic commit option for all database transactions has failed.

Variable: None.

Action Required: The application has to be re-run. Contact your System Administrator.

2116 N Attempt to database recovery was aborted by the user

Explanation: During database recovery, a warning message is prompted to the user for overwriting the current database. Database recovery cannot be interrupted once it starts. With this message the user has selected to discontinue with the database recovery process.

Variable: None.

Action Required: None. This message is informational only.

2118 E Could not create the *filename* file.

Explanation: The file creation command failed. This message is logged when the installation program is unable to create the odbc.ini file. The installation program fails to create this file when any one of the following environment variables is not set :

- $ACS_HOME
- $INFORMIXDIR

- $HW_PLATFORM

Variable: *filename*. The odbc.ini file.

Action Required: Check whether the above-mentioned variables are set. If these are not set, please reinstall ACSLS.

2122 E Informix database backup area unavailable.

Explanation: This error is logged when you select a backup directory that cannot be used for backup purposes. This can happen for the following reasons:

- The directory chosen is not available or could not be created
- The file permissions can not be altered for the directory

Action Required: Reinstall ACSLS and enter the correct directory name.

2123 I Extracting Informix configuration files. This will take approximately *num* minutes. This Informix configuration can support sites with up to *num* cells in the attached LSMS.

Explanation: This message is displayed during the installation of the product.

Variable: *num* The number of minutes or cells.

Action Required: None. This message is informational only.

2125 E Database gentle shutdown did not succeed.

Explanation: The db_command stop command performs a gentle shutdown of the database server. This error is logged when the command fails after 10 retries.

Action Required:

- If the error occurred during initial installation, reinstall the product and retry.

- If the existing database is corrupted, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2126 E `Database forced shutdown did not succeed.`

Explanation: The `db_command stop_force` command performs a gentle shutdown of the database server. This error is logged when the command fails after 10 retries.

Action Required:

- If the error occurred during initial installation, reinstall the product and retry.
- If the existing database is corrupted, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2128 E `Informix Storage Manager server is not up.`

Explanation: The `db_command ism_start` command starts the Informix Storage Manager (ISM) server. This error is logged when the command fails to start the server.

Action Required:

- If the error occurred during initial installation, reinstall the product and retry.
- If the existing database is corrupted, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2129 E `Informix Storage Manager server is not shutdown.`

Explanation: The `db_command ism_stop` command shuts down the Informix Storage Manager (ISM) server. When the command fails to shut down the server, then this error is logged.

Action Required:

- If the message occurred during initial installation, reinstall ACSLS and retry.
- If the existing database is corrupted, collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2200 E `Cannot create group informix.`

Explanation: This error can occur only while installing the product on an AIX operating system. The installation program creates the Unix group named `informix`. It calls the Unix command `mkgroup` to create the group. This error is logged if the `mkgroup` command fails. Group ID # 106 should be available.

Action Required: Reinstall ACSLS after the problem has been corrected.

2201 E `Cannot change informix group.`

Explanation: This error can occur only while installing the product on an AIX operating system. The installation program changes the ID of the UNIX group named `informix`. It calls the UNIX command `chgroup` to create the group. This error is logged if the `chgroup` command fails.

Action Required: Reinstall ACSLS after the problem has been corrected.

2202 E Cannot create informix user.

Explanation: This error can occur only while installing the product on an AIX operating system. The installation program creates the UNIX user named `informix`. It calls the UNIX command `mkuser` to create the group. This error is logged if the `mkuser` command fails. User ID # 11 should be available.

Action Required: Reinstall ACSLS after the problem has been corrected.

2203 E Cannot create lib6 user.

Explanation: This error can occur only while installing the product on an AIX operating system. The installation program creates the UNIX user named `lib6`. It calls the UNIX command `mkuser` to create the group. This error is logged if the `mkuser` command fails. User ID # 203 should be available.

Action Required: Reinstall ACSLS after the problem has been corrected.

2205 E Group file update (informix) failed: updates discarded.

Explanation: This error can occur only while installing the product on a Sun Solaris operating system. The installation program creates the UNIX group named `informix`. If the group name already exists, it tries to update the entry. This error is logged if the update fails.

Action Required: Reinstall ACSLS after the problem has been corrected.

2206 E `Group file move (informix) failed: updates discarded.`

Explanation: This error can occur only while installing the product on a Sun Solaris operating system. The installation program creates the UNIX group named `informix`. It tries to move the previous version of group file. This error is logged if the move fails.

Action Required: Reinstall ACSLS after the problem has been corrected.

2207 E `Insufficient disk space available in` *`disk`*`. Need` *`needed_space`* `Kb. Have` *`available_space`* `Kb. You must make at least` *`needed_space`* `Kb available in` *`disk`* `before installing Informix.`

Explanation: The installation program verifies the available disk space before commencing the installation. This message is logged if the disk where ACSLS is being installed does not have enough space to install Informix software.

Variable:

- *`disk`* The disk on which the ACSLS product is being installed.
- *`needed_space`* The disk space needed to install Informix.
- *`available_space`* This indicates the space available on the disk.

Action Required:

- Make space in the chosen directory by deleting files,
- Choose another directory that has more disk space, then reinstall ACSLS

  or

- Install a larger disk

2208 E `Could not install informix.`

Explanation: This error is logged when the Informix software installation fails. The cause can be one or several of the following:

- The directory chosen to install Informix is not writable.
- The disk specified for backups had insufficient space.
- The file `sqlhosts` is not available in the `$INFORMIXDIR/etc` directory.
- Initialization of the shared memory failed.

Action Required:

- The directory chosen to install Informix is not writable. Choose a directory that has write access and reinstall ACSLS.
- If the installation is being done using tapes, the tape is bad and the extraction failed. Replace the media and reinstall ACSLS.
- The disk specified for backups had insufficient space on it. Increase the available disk space and reinstall ACSLS.
- The file `sqlhosts` is not available in the `$INFORMIXDIR/etc` directory. Replace the media and reinstall ACSLS.
- Initialization of the shared memory failed. Reinstall ACSLS.

2209 W $INFORMIXDIR exists, install will not overlay an existing informix subsystem. To re-install the informix software, exit install and remove the $INFORMIXDIR directory structure.

Explanation: The installation program checks whether the Informix software has already been installed. If Informix is already installed, one more installations on top of it is not allowed.

Action Required:

- Delete the current installation of Informix and reinstall ACSLS.

  or

- Continue with the installation. The earlier installation of Informix will be retained.

2210 E An ACSLS database already exists (lib6). Install will not overlay an existing ACSLS database. ACSLS WILL NOT WORK WITH A DATABASE CREATED BY ACSLS 5.x. Unless you are sure that this database was created by ACSLS 6.0 or greater, you are STRONGLY encouraged to export the old database and then remove it. To remove the old database, exit the install script and remove the *informix_dir* directory hierarchy.

Explanation: This message will be displayed if the ACSLS database already exists.

Variable:

- *cur_rel* Current release number
- *informix_dir* The directory where the Informix database is going to be installed. Typically this will be $ACS_HOME/../informix/IDS7.3

Action Required: The installation program, after logging this error, displays the following prompt:

"Continue with install? (If you answer yes, the database area will be unchanged.

- Press yes if you are sure the database was created by ACSLS 6.0 or above.
- Press no if the database was created by ACSLS 5.x. Remove the $INFORMIXDIR and run the install.sh script again.

2211 E *program*: Cannot connect to Informix. Status code (*error_code*).

Explanation: The application encountered this error while trying to connect to the Informix Database. The possible causes are listed below:

- The .odbc.ini file is either corrupted, missing or inaccessible.
- The driver files are missing.
- The environment variable $LD_LIBRARY_PATH does not point to the Informix library path.

Variable:

- p*rogram* The name of the source file where the error was encountered.
- *error-code* The error code returned by the application on return from the SQLConnect ODBC function.

Action Required:

- Check to see whether the ..odbc.ini file is in the $ACS_HOME directory.
- Check to see whether the variable $ODBCINI is pointing to the $ACS_HOME directory.
- Ask the System Administrator or StorageTek Support to verify whether the Informix ODBC driver files are present.
- Check to see whether the variable $LD_LIBRARY_PATH includes $INFORMIXDIR/lib, $INFORMIXDIR/lib/cli, and $INFORMIXDIR/lib/esq*l*.
- If the problem persists, contact your system administrator or StorageTek Support with the *error-code*.

2213 I `Informix database configuration files backup successfully completed.`

Explanation: During each backup, the critical Informix configuration files are also backed up. After the backup is completed successfully, this message is logged.

Action Required: None. This message is informational only.

2214 E `Cannot initialize the Informix Storage Manager server.`

Explanation: This message is logged when the installation of the product Informix Storage Manager (ISM) fails. This typically happens because of an existing installation of the Informix Storage Manager.

Action Required: Remove the `$INFORMIXDIR/ism` directory and run the install.sh script again.

2215 E `Error in granting permission to informix as Informix Storage Manager user.`

Explanation: The installation program specifies `root` and `informix` as the administrators for the Informix Server Manager. This message is logged when granting permission to informix fails. This can happen if the informix user does not exist.

Action Required:

- Check to see whether the UNIX user `informix` exists, otherwise create the UNIX user `informix`.
- Check the host name. If it is corrupted, correct it.
- Reinstall ACSLS.

2216 E Error in adding the device *dev*.

Explanation: During installation, the installation program registers the backup directories with Informix Storage Manager to be treated as backup devices. This message is logged when this process fails. This can happen for the following reasons:

- The backup directory does not exit.
- The backup directory is already mounted.
- Informix Storage Manager can support a maximum of four devices. If four devices have been mounted already, this error is logged.

Variable: *dev* The backup directory that is being registered as a backup device.

Action Required:

- Check to see whether the directory exists. If not, then create one with the same name and retry installation. If it exists, the permission should be 664.
- Collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2217 E Error in labeIling *dev*.

Explanation: During installation, the install program creates backup volumes. This message is logged when this process fails. This can happen if a volume with the same name already exists.

Variable: *dev* The backup directory which is associated with the backup volume.

Action Required: Collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2218 E Error in mounting *dev*.

Explanation: During installation, the install program creates and mounts backup volumes. This message is logged when mounting a backup device fails. This can happen for the following reasons:

- The device does not exist.
- The backup volume with which the device is associated does not exist.

Variable: *dev* The directory that is getting mounted.

Action Required: Collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2220 E Error in creating new devices.

Explanation: During installation of second disk, the backup directories are shifted to directories in the second disk. This message is logged when this process fails.

Action Required: Please refer to the sd_event.log and see the error message number logged before this error number in order to know the exact reason for failure. One of the following errors may be the reason for failure:

- Please refer to the following error numbers in the ACSLS 6.0 Messages manual for more details : 1581, 1516, 1569, 2227, 2229, 2230, 2216, 2217, and 2218.
- Collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2221 I `Secondary disk already installed.`

Explanation: This message is logged while doing the second disk installation if a secondary disk has already been installed.

Action Required: When this error occurs, it means that a second disk is already installed and no action is required.

2222 I `ACSLS miscellaneous files backup successfully completed.`

Explanation: ACSLS miscellaneous file backup was successful.

Action Required: None. This message is informational only.

2225 E `Error in turning mirror off for rootdbs.`

Explanation: This message is logged while deinstalling the second disk.

Action Required: Contact your System Administrator or collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2226 I `Second disk de-installation completed successfully.`

Explanation: This message is logged when second disk deinstallation is completed successfully.

Action Required: This message is informational only. It will not appear if the installation fails.

2227 E `Error in unmounting dev.`

Explanation: This message is logged when an error occurs while installing or deinstalling the second disk. Also, the dismount fails if the backup device is in use by a backup or restore session.

Variable: *dev* The directory being dismounted.

Action Required:

- Check to see whether any backup process is running. If so, wait till the backup is completed.
- If the error was encountered while installing the second disk option, reinstall sd_mgr.sh.
- If the error was encountered while deinstalling the second disk option, reinstall sd_mgr.sh.

2228 E `Unable to mirror dbspace on Secondary disk.`

Explanation: As a part of the second disk installation, ACSLS mirrors the database on to the second disk in order to provide additional security for your data against failures. This message is logged if the process of mirroring fails.

Action Required:

- Make sure the path given for the second disk is a valid one.
- Make sure the proper permissions (667) are set for the mirror dbspace on the second disk.
- If the problem still persists, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2230 E Unable to remove the device *dev*.

Explanation: During installation of a second disk, the backup directories are shifted to directories in the second disk. In this process, the devices used with the primary disk are removed. This message is logged when this process fails.

Variable: *dev* The directory being removed.

Action Required:

- Check to see whether any backup process is running. If so, wait till the backup has completed.
- If the error was encountered while installing the second disk option, reinstall sd_mgr.sh.
- If the error was encountered while deinstalling the second disk option, reinstall sd_mgr.sh.

2231 E `Could not install Informix Storage Manager.`

Explanation: As a part of the product installation, the Informix Storage Manager (ISM) also gets installed. If the installation was unsuccessful, then this message is logged. The possible causes for failure are listed below:

- The environment variable $INFORMIXDIR is not set
- The environment variable $INFORMIX_BACKUP_DIRECTORY is not set.
- The installation creates the backup directory structure. The permissions to these directories are insufficient.
- Another instance of ISM is running in the background
- If the installation program found that the ISM had already been installed, it attempted to remove the previous installation and failed.
- As a part of the installation, the script tried to initialize the ISM server and failed.
- The backup devices could not be assigned to the backup volumes.

Action Required: Please refer to `/tmp/install.log` to judge the exact point of failure. The action could be one of the following:

- If the failure is due to corruption or absence of environment variables, please log out and login again. ACSLS automatically reloads the variables at the time of login.
- Contact your System Administrator or StorageTek Support to ensure that sufficient permissions are granted to the backup directories you have chosen.
- If another instance of ISM is running in the background, please ask your System Administrator or have StorageTek Support assist you in killing that instance, then reinstall the product.

- Try to reinstall ACSLS.
- Please refer to the following error numbers in this book for more details: 1516, 1476, 2129, 2243, 2214, 2215, 2216, 2217, and 2218.

2232 E Informix is installed on disk *informix_par*. The directory for second disk support must be on a different disk. The following is the output from the UNIX df command: *output*.

Explanation: The directory specified for second disk support lies in the same partition as that of the primary disk. To avoid complete loss of data and backups in the event of disk crash, it is essential that the backups are on another disk.

Variable:

- *informix_par* The name of the disk on which Informix is installed.
- *output* The output from the df command.

Action Required: Reinstall ACSLS, specifying a disk volume that is different from the one in use by the Informix installation.

2233 N *program*: Cannot set ODBC driver version. Status code (*error_code*).

Explanation: An internal error happened while ACSLS was trying to connect to the database.

Variable:

- *program* This is the name of the source file where the error was encountered.
- *error_code* The error code encountered by the application on return from the SQLSetEnvAttr ODBC function.

Action Required: Reboot the server and retry (suspecting memory to be the reason).

2234 I Informix database backup started.

Explanation: Informix started the database backup process.

Action Required: None. This message is informational only.

2236 I Informix database backup successfully completed.

Explanation: Informix successfully completed the backup of the database.

Action Required: None. This message is informational only.

2237 E EXEC SQL delete from audittable.

Explanation: An attempt to delete the rows from the audit table has failed.

Action Required: Collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2238 E *directory* doesn't have sufficient disk space for Informix second disk support. *directory* has *available_space* Kb available. A minimum of *minimum_space* Kb is required. The following is the output from the UNIX df command.

Explanation: The directory specified for second disk support does not have sufficient free space.

Variable:

- *directory* The name of the directory specified for second disk support.
- *available_space* The amount of space available on that directory.

- *minimum_space* The minimum amount of space required for second disk support.

Action Required: Create at least *minimum_space* KB of space in the directory specified or specify a different directory which has the minimum required space on it.

2240 E Unable to configure volume *backup data_volume.*

Explanation: As a part of the manual backup, the backup files are archived to a tar file. During this process, the backup devices are configured to disallow backups until the archival is complete. This message is logged if an error occurs while configuring the backup devices.

Variable: *backup data_volume* The backup volume that could not be configured. Volume names suffixed with pri_ indicate that they are primary disk volumes. Similarly, volume names suffixed with sec_ indicate that they are secondary disk volumes.

Action Required: Please log out, log in as acsss and retry the second disk installation/deinstallation.

2241 E Failed to reset *logfile_name.*

Explanation: During the course of time, some of the key Informix log files keep growing in size. In order to prevent this uncontrolled growth, these files are moved to backup files periodically.

Variable: *logfile_name* The name of the log files being moved.

Action Required: Ensure that you are logged in as the correct user to execute this utility.

- Check the file access permissions for these files.
- Check the user permissions for these files. They should be 667.
- If you find that the variable $ACS_HOME was accidentally erased, please log out and log in again.

2242 I Informix database recovery started.

Action Required: Explanation: Informix has begun the recovery of the database.

Action Required: None. This message is informational only.

2243 E Cannot remove the directory *directory.*

Explanation: Deletion of a directory may have failed due to access permission problems.

Variable: *directory* The directory being deleted.

Action Required: Ensure that you are logged in as the correct user to execute this utility. Check the access permissions for the directory.

2245 E Unable to configure Informix Storage Manager retention period.

Explanation: The attempt to change the retention period of the backups failed. This typically happens either during installation or while changing the retention period using the configuration script acsss_config.

Action Required: Restart the installation or configuration. If the error still persists, contact your System Administrator or collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2246 E Failed to add neccessary CRON entry for automatic backup.

Explanation: The automatic backup configuration script registers the periodic backup event with the Operating System Scheduler. This error is logged when the registration failed.

Action Required: Contact your System Administrator or collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2248 E `Informix database backup failed.`

Explanation: The backup of the Informix database has failed. The failure may be due to the following reasons:

- The Informix Server Manager utility onbar failed to back up.
- After the backup, a verification is done to check whether the backup files are error–free. The backup process aborts if the verification fails.
- There was not enough space on the backup disk.

Action Required:

- Check the acsss_event.log for presence of error code 2256. This indicates that the problem was due to lack of disk space. Execute the script acsss_config to decrease the backup retention period.
- If the problem persists, collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2250 I `ACSLS database recovery successfully completed. Database has been restored to the point of the specified backup.`

Explanation: This message is logged after successfully restoring from a previous local disk backup.

Action Required: None. This message is informational only

2253 I `Informix database configuration files backup started.`

Explanation: The backup process automatically backs up critical Informix database configuration files. This message is logged when the backup of these files is started.

Action Required: None. This message is informational only.

2254 E `Informix database configuration files backup failed.`

Explanation: The backup process automatically backs up critical Informix database configuration files. The backup of these configuration files has failed. This could be due to the following reasons:

- The Informix database configuration files were not present in the directory $INFORMIXDIR/etc.
- The contents of the variable $INFORMIXDIR were altered accidentally.
- The files are copied to the directory $INFORMIX_BACKUP_DIRECTORY/misc. The write permission to this directory has been removed.

Action Required:

- Reinstall ACSLS if any product files are missing.
- Please log out of the session and login again. ACSLS reloads all the variables. If the error occurred because the environment variables got altered accidentally, the reloading will set it right.
- Ask your System Administrator to verify the permissions to the directory $INFORMIX_BACKUP_DIRECTORY/misc. The permission should be 667.

2256 I Disk is *percentage* full, please decrease the database backup retention period to free disk space.

Explanation: The disk used for backup is running out of space. If expired volumes are not removed, there is a very high possibility of the backup disk overflowing. As a result, the automatic backup could fail to back up your data.

Variable: *percentage* The percentage indicating the amount of the disk space already used.

Action Required:

- Run the acsss_config script.
- Select the option 5: Set automatic backup parameters.
- Reply **n** for the prompt Would you like to modify the automatic backup settings? (y or n*):*
- Using the next prompt, set the retention period to a lower value. This setting automatically deletes expired backups, thereby releasing locked up disk space.

2257 E `Unexpected error occured in automatic configuration settings.`

Explanation: The script that allows the user to configure the automatic backup parameters has failed. The failure may be due to the following reasons:

- The variable $ACS_HOME points to an incorrect directory.
- This script depends upon another script $ACS_HOME/.acsss_env. That script is missing.
- Could not find script fix_autobkup_cron.sh.
- The configuration program registers your auto backup settings with the Operating System Scheduler. This process failed.

Action Required:

- Please log out of the session and log in again. ACSLS reloads all the variables. If the error occurred because the environment variables got altered accidentally, the reloading will set it right.
- Reinstall ACSLS if any product files are missing.
- Execute the script acsss_config to configure the auto–backup parameters.

2258 E `Expired backup files could not be removed.`

Explanation: ACSLS removes expired backup files prior to initiating a backup in order to avoid overfilling the backup disk. This message indicates that the recycling of the expired files could not be completed successfully.

This can happen if:

- The environment file $ACS_HOME/.acsss_env is not found.
- Environment variable RETENTION_PERIOD is not set.
- The variable $INFORMIX_BACKUP_DIRECTORY was altered or erased.
- The variable $INFORMIX_BACKUP_DIRECTORY points to an incorrect directory.
- There is no permission to delete files in the directory pointed to by $INFORMIX_BACKUP_DIRECTORY.

Action Required:

- Log out of the session and log in again with the correct user ID. ACSLS reloads all the variables. If the error occurred because the environment variables got altered accidentally, the reloading would set it right.
- Reinstall ACSLS if any product files are missing.
- Contact your System Administrator or collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2259 I Recycle of expired files completed.

Action Required: ACSLS removes expired backup files prior to initiating a backup in order to avoid overfilling the backup disk. This message indicates that the recycling of the expired files was completed successfully.

Action Required: None. This message is informational only.

2260 I Informix configuration files have been restored.

Explanation: The recovery of the Informix configuration files has been completed successfully.

Action Required: None. This message is informational only.

2261 I Backup of ACSLS miscellaneous files started.

Explanation: The backup of the miscellaneous files used by the ACSLS product is being started.

Action Required: None. This message is informational only.

2262 W Failed to recycle expired files.

Explanation: An internal error occurred while trying to recycle expired backup files.

Action Required: No action required.

2263 E Failed to clear sysutils database.

Explanation: An internal error occurred while trying to clearing sysutils database.

Action Required:

- If the database is not already up, bring it up using:

  db_command start

- Login as root.

- Run the script:

  $INFORMIXDIR/etc/clear_sysutils.sh.

- If the script runs successfully, manually backup the ACSLS database using `bdb.acsss`.

- If the script does not run successfully, save the messages reported on the screen, and collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2270 E `Cartridge stuck in in-transit cell. Please vary LSM` *`lsm_id`* `offline and back online again to recover the cartridge.`

Explanation: A cartridge is stuck in the in–transit cell of LSM with identifier *`lsm_id`*.

Variable: *`lsm_id`* is the LSM identifier.

Action Required: Vary the LSM specified in the message offline and back online to recover the cartridge.

2271 E `LSM` *`lsm_id`* `in maintenance mode.`

Explanation: The LSM with the specified *`lsm_id`* is in maintenance mode.

Variable: *`lsm_id`* is the LSM identifier.

Action Required:

- Record any status information displayed on the Library.

- IPL the LSM. In ACSLS, vary the LSM online.

- If the problem persists, call your StorageTek Customer Service Engineer (CSE).

2272 I Micro-code had been changed in LSM *lsm_id*.

Explanation: The microcode level for the LSM with identifier *lsm_id* has been changed.

Variable: *lsm_id* is the LSM identifier.

Action Required: None. This message is informational only.

2273 E Pass-thru port inoperative in LSM *lsm_id*.

Explanation: The pass–thru port in LSM with identifier *lsm_id* is inoperative.

Variable: *lsm_id* is the LSM identifier.

Action Required:

- Record any status information displayed on the Library.
- IPL the LSM. In ACSLS, vary the LSM online.
- If the problem persists, call your StorageTek Customer Service Engineer (CSE).

2274 E LSM *lsm_id* Not Ready. Manual Intervention Required.

Explanation: The LSM with identifier *lsm_id* is not ready. Possible reasons are that a door is open or a cartridge is stuck in the LSM hand.

Variable: *lsm_id* is the LSM identifier.

Action Required:

- Check the LSM hand and manually remove cartridge.
- Be sure the LSM door is closed.

2275 E Cartridge stuck in pass-thru port. Please vary any LSM in ACS *acs_id* offline and back online again to recover the cartridge.

Explanation: A cartridge is stuck in the pass–thru port of ACS *acs_id*. Vary any LSM in the ACS specified in the message offline and back online to recover the cartridge.

Variable: *acs_id* is the ACS identifier.

Action Required: Vary any LSM in the ACS specified in the message offline and back online to recover the cartridge.

2276 W LSM *lsm_id* could not recover volume *vol_id*.

Explanation: One of the LSMs could not recover a cartridge.

Variable:

- *lsm_id* is the LSM identifier.
- *vol_id* is the Volume identifier of the cartridge.

Action Required: None. The cartridge will probably be recovered by the other LSM of the L700e pair while coming online.

2277 I LSM *lsm_id* received Unit Attention Sense: *sense_code* (*sense_desc*).

Explanation: A SCSI device has returned a Sense Code for the LSM *lsm_id*.

Variable:

- *lsm_id* is the LSM identifier.
- sense_code is the Sense Code returned by the SCSI device.
- *sense_desc* is a brief description of the sense code returned.

Action Required: None. This message is informational only.

2278 W LSM *lsm_id* received Sense: *sense_code* (*sense_desc*).

Explanation: A SCSI device has returned a Sense Code for the LSM *lsm_id*.

Variable:

- *lsm_id* is the LSM identifier.
- *sense_code* is the Sense Code returned by the SCSI device.
- *sense_desc* is a brief description of the sense code returned.

Action Required:

- Record any status information displayed on the Library.
- IPL the LSM. In ACSLS, vary the LSM online.
- If the problem persists, call your StorageTek Customer Service Engineer (CSE).

2280 E DB status [*err_num*] detected on delete from clienttable

Explanation: An attempt to delete a client record from the database has failed.

Variable: *err_num* is the error number.

Action Required:

- Restart the application server and see if the problem persists.
- If it does, restart the database and see if the problem persists.
- If it does, collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2281 E Exec SQL lock timeout on delete from clienttable.

Explanation: An attempt to delete a locked client record from the database has failed.

Action Required:

- Restart the application server and see if the problem persists.
- If it does, restart the database and see if the problem persists.
- If it does, collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2283 E Unexpected resource type *rsc_type* and resource status *rsc_status*

Explanation: An unexpected match of resource type and resource status is detected.

Variable:

- *rsc_type* is the value of resource type.
- *rsc_status* is the value of resource status.

Action Required: Collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2284 I Status of *lib_cmpnt cmpnt_id* is changed to *status*.

Explanation: Status of a library component, e.g., LSM, CAP or DRIVE with an identifier *cmpnt_id*, e.g., 0,0(lsm_id) or 0,0,0(cap_id) or 0,0,7,1(drive_id) is changed to *status*.

Variable:

- *lib_cmpnt* is library component type, e.g., LSM, DRIVE, or CAP.
- *cmpnt_id* is the identifier of a library component, e.g., 0,0(lsm_id), 0,0,0(cap_id), or 0,0,7,1(drive_id).
- *Status* is the new status value.

Action Required: None. This message is informational only.

2285 E Invalid *lib_cmpnt cmpnt_id* received in a message from *module_type*; dropping message

Explanation: This message indicates that acsmon received a message that included an invalid component identifier. The message is dropped, and normal processing continues.

Variable:

- *lib_cmpnt* is the library component type, e.g., LSM or DRIVE
- *cmpnt_id* is the identifier of a library component, e.g., 0,0(lsm_id) or 0,0,7,1(drive_id)

- *module_type* is the name of the module that sent the message

Action Required: Collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2287 I Serial number of *lib_cmpnt cmpnt_id* changed to *serial_num*.

Explanation: This message is to indicate that there is a serial number change for a library component, e.g., LSM or DRIVE with an identifier *cmpnt_id*, e.g., 0,0(lsm_id) or 0,0,7,1(drive_id).

Variable:

- *lib_cmpnt* is library component type, e.g., LSM or DRIVE.
- *cmpnt_id* is the identifier of a library component, e.g., 0,0(lsm_id) or 0,0,7,1(drive_id).
- *serial_num* is the new serial number.

Action Required: None. This message is informational only.

2288 E EXEC SQL failed to create *table_name*, error = *err_num*

Explanation: An ODBC call to prepare an SQL statement for creating a table *table_name* has failed.

Variable:

- *table_name* is table name to be created.
- *err_num* is the error number returned by ODBC.

Action Required:

- Restart the database and see if the problem persists.
- If it does, contact your System Administrator.

2289 E DB status [*err_num*] detected on delete for client id *client_id*

Explanation: An attempt to delete a client record from the database has failed.

Variable:

- *err_num* is the error number.
- c*lient_id* is the identifier of the client to be deleted.

Action Required:

- Restart the application server and see if the problem persists.
- If it does, restart the database and see if the problem persists.
- If it does, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2290 E EXEC SQL lock timeout on delete from clienttable where client_id = *clnt_id*

Explanation: An ODBC call to prepare an SQL statement for deleting a client record from clienttable has failed.

Variable:

clnt_id is an identifier of the client to be deleted.

Action Required:

- Restart the application server and see if the problem persists.
- If it does, restart the database and see if the problem persists.
- If it does, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of

this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2291 E `EXEC SQL delete from clienttable failed, where client_id = clnt_id`

Explanation: An attempt to delete a locked client record from clienttable has failed.

Variable:

clnt_id is the identifier of the client to be deleted.

Action Required:

- Restart the application server and see if the problem persists.
- If it does, restart the database and see if the problem persists.
- If it does, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2292 E `EXEC SQL select client_id clnt_id from clienttable failed`

Explanation: An ODBC call to prepare an SQL statement for selecting a client record(s) from clienttable has failed.

Variable:

clnt_id is the identifier of the client to be deleted.

Action Required:

- Restart the application server and see if the problem persists.
- If it does, restart the database and see if the problem persists.
- If it does, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of

this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2293 E EXEC SQL failed to open *cursor*.

Explanation: An ODBC call to prepare an SQL statement for opening a cursor has failed.

Variable:

cursor is the database handle for executing SQL statement.

Action Required: Action Required: The application has to be re–started. Contact your System Administrator.

2295 I Starting automatic backup to local disk.

Explanation: This message is displayed when you opt not to take backup on to a tape while exiting from rdb.acsss. In this case, an automatic backup to local disk is triggered.

Action Required: None. This message is informational only.

2297 W Informix Database Space is *percentage* full, please contact StorageTek Support.

Explanation: This message is logged when the database space exceeds 85% of its capacity. An hourly cron job checks the database space. So once you see this message, you will see this again every hour until more database space is allocated.

Variable: *percentage* The percentage indicating the amount of database space file already used.

Action Required: For guidance on allocating more space to the existing database space, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2298 W ACSLS is running. To stop the database, ACSLS must first be shutdown using 'idle' and 'kill.acsss'. Exiting.

Explanation: This error is logged when you try to stop the database while ACSLS is running. This is not allowed since the application communicates extensively with the database. Hence, the ACSLS application must be shut down prior to shutting down the database.

Action Required:

- Stop ACSLS by executing the commands idle and kill.acsss.
- Shut down the database server using db_command stop.

2299 W ACSLS is running. To run rdb.acsss, ACSLS must first be shutdown using 'idle' and 'kill.acsss'. Exiting.

Explanation: This message is logged when you try to recover the database using rdb.acsss while the ACSLS application is running.

Action Required:

- Stop ACSLS by executing the commands idle and kill.acsss.
- Shut down the database server using db_command stop.

2303 E getenv failed for \"LSPID_FILE\" in *mod_id* at line *line_number*.

Action Required: An attempt to get the environment variable LSPID_FILE, which would indicate ACSLS is running, has failed.

Variable:

- *mod_id* is the name of the module issuing the error message.
- *line_number* is the location in the ACSLS code where the error was detected.

Action Required: None. The program exits after issuing the message.

2304 E stat failed for ${LSPID_FILE} in *mod_id* at line *line_number*. errno is *error_no*: *error*

Explanation: An attempt to locate the /tmp/acsss.pid file has failed. ACSLS can not run properly without this process.

Variable:

- *mod_id* is the name of the module issuing the error message.
- *line_number* is the location in the ACSLS code where the error was detected.
- *error_no* is the error number returned if the /tmp/acsss.pid file doesn't exist.
- *error* is the text of the error message for *error_no*.

Action Required: None. The program exits after issuing the message.

2305 I ACSLS must be running to execute *command*

Explanation: The command that was entered can not run without an active ACSLS session.

Variable: *command* is the command that was entered by the user.

Action Required: None. The program exits after issuing the message.

2306 I Volume found in the library. Unable to delete, use EJECT.

Explanation: A manual volume delete request failed because the volume to be deleted was located by the Cartridge Recovery component. Manual volume delete can not be used to delete a verifiably present volume in an active LSM. In such a case, EJECT should be used to remove tapes from an LSM.

Action Required: None. The program exits after issuing the message.

2307 W Cartridge Recovery could not examine all recorded locations for this volume.

Explanation: The Cartridge Recovery component was unable to catalog a library location where the requested volume may reside. This can be due to an offline LSM or a non-communicating drive. User confirmation is required to delete these volumes. This message is issued in conjunction with MSG 2308 below. This message is suppressed and confirmation assumed if the -n (no_confirm flag) was included in the original manual volume delete message.

Action Required: None. The program exits after issuing the message.

2308 I Do you really want to delete volume *vol_id* from the database? [yes|no]

Explanation: A request for user confirmation is issued whenever the Cartridge Recovery component can not examine all possible library locations for the volume (see MSG 2307 above). This message is suppressed and confirmation assumed if the -n (no_confirm flag) was included in the original manual volume delete message.

Variable: *vol_id* is the volume serial number requested for deletion.

2309 E : md_proc_init failure: status = *status*

Explanation: The function to register this process for error logging failed.

Variable:

- *mod_id* is the name of the module issuing the error message.
- *status* is the text of the status value returned from cl_ipc_create().

Action Required: None. The program exits after issuing the message.

2310 E *mod_id*: atexit failure: errno = *error_no: error_msg*

Explanation: This message is issued for a failed attempt to register the database disconnect or ipc destroy wrapper functions to be executed at the time the manual volume delete process exits.

Variable:

- *mod_id* is the name of the module issuing the error message.
- *error_no* is the error number returned if the /tmp/acsss.pid file doesn't exist.
- *error_msg* is the text of the error message that corresponds with *error_no*.

Action Required: None. The program exits after issuing the message.

2311 E *mod_id*: cl_db_connect failure: status = *status*

Explanation: The program was unsuccessful in connecting to the database.

Variable:

- *mod_id* is the name of the module issuing the error message.
- *status* is the text of the status value returned from cl_db_connect().

Action Required: None. The program exits after issuing the message.

2312 E *mod_id*: cl_vol_read failure: status = *status*

Explanation: An attempt to read a volume record from the database failed.

Variable:

- *mod_id* is the name of the module issuing the error message.
- *status* is the text of the status value returned from cl_vol_read().

Action Required: None. The program exits after issuing the message.

2313 E *mod_id*: cl_cel_read failure: status = *status*

Explanation: An attempt to read a cell record from the database failed.

Variable:

- *mod_id* is the name of the module issuing the error message.
- *status* is the text of the status value returned from cl_cel_read().

Action Required: None. The program exits after issuing the message.

2314 E *mod_id*: cl_lsm_read failure: status = *status*

Explanation: An attempt to read an LSM record from the database failed.

Variable:

- *mod_id* is the name of the module issuing the error message.
- *status* is the text of the status value returned from cl_lsm_read().

Action Required: None. The program exits after issuing the message.

2315 E *mod_id*: cl_drv_read failure: status = *status*

Explanation: An attempt to read a drive record from the database failed.

Variable:

- *mod_id* is the name of the module issuing the error message.
- *status* is the text of the status value returned from cl_drv_read().

Action Required: None. The program exits after issuing the message.

2316 E *mod_id*: cl_loc_read failure: status = *status*

Explanation: An attempt to read a lock record from the database failed.

Variable:

- *mod_id* is the name of the module issuing the error message.
- *status* is the text of the status value returned from cl_loc_read().

Action Required: None. The program exits after issuing the message.

2317 E *mod_id*: cl_vac_read failure: status = *status*

Explanation: An attempt to read a volume access control record from the database failed.

Variable:

- *mod_id* is the name of the module issuing the error message.
- *status* is the text of the status value returned from cl_vac_read().

Action Required: None. The program exits after issuing the message.

2318 E *mod_id*: cl_vol_destroy failure: status = *status*

Explanation: An attempt to delete a volume record from the database failed.

Variable:

- *mod_id* is the name of the module issuing the error message.
- *status* is the text of the status value returned from cl_vol_destroy().

Action Required: None. The program exits after issuing the message.

2319 E *mod_id*: cl_cel_write failure: status = *status*

Explanation: An attempt to update a cell record on the database failed.

Variable:

- *mod_id* is the name of the module issuing the error message.
- *status* is the text of the status value returned from cl_cel_write().

Action Required: None. The program exits after issuing the message.

2320 E *mod_id*: cl_db_disconnect failure: status = *status*

Explanation: An attempt to disconnect from the database failed.

Variable:

- *mod_id* is the name of the module issuing the error message.
- *status* is the text of the status value returned from cl_db_disconnect().

Action Required: None. The program exits after issuing the message.

2321 E *mod_id*: Cartridge Recovery failure: status = *status*

Explanation: The Cartridge Recovery (ACSCR) component returned an error.

Variable:

- *mod_id* is the name of the module issuing the error message.
- *status* is the text of the status value returned from the Cartridge Recovery component (ACSCR).

Action Required: None. The program exits after issuing the message.

2322 E *mod_id*: cl_ipc_write failure: status = *status*

Explanation: The ipc write function returned an error.

Variable:

- *mod_id* is the name of the module issuing the error message.
- *status* is the text of the status value returned from cl_ipc_write().

Action Required: None. The program exits after issuing the message.

2323 E *mod_id*: cl_ipc_read failure: status = *status*

Explanation: The ipc read function returned an error.

Variable:

- *mod_id* is the name of the module issuing the error message.
- *status* is the text of the status value returned from cl_ipc_read().

Action Required: None. The program exits after issuing the message.

2324 E *mod_id*: cl_ipc_destroy failure: status = *status*

Explanation: The cl_ipc_destroy function returned an error.

Variable:

- *mod_id* is the name of the module issuing the error message.
- *status* is the text of the status value returned from the function.

Action Required: None.

2325 E *mod_id*: cl_qm_init failure: status = *status*

Explanation: The cl_qm_init function returned an error.

Variable:

- *mod_id* is the name of the module issuing the error message.
- *status* is the text of the status value returned from the function.

Action Required: None.

2326 E *mod_id*: cl_qm_qcreate failure: queue = *queue_name*

Explanation: The cl_qm_qcreate function returned an error.

Variable:

- *mod_id* is the name of the module issuing the error message.
- *queue_name* is the name of the internal queue for which the failure occurred.

Action Required: None.

2327 E *mod_id*: cl_qm_mcreate failure: queue = *queue_name*

Explanation: The cl_qm_mcreate function returned an error.

Variable:

- *mod_id* is the name of the module issuing the error message.
- *queue_name* is the name of the internal queue for which the failure occurred.

Action Required: None.

2328 E *mod_id*: cl_qm_maccess failure: member = *member_id*

Explanation: The cl_qm_maccess function returned an error.

Variable:

- *mod_id* is the name of the module issuing the error message.
- *member_id* is the identifier of the queue member for which the failure occurred.

Action Required: None.

2329 E *mod_id*: cl_qm_mlocate failure: member = *member_id*

Explanation: The cl_qm_mlocate function returned an error.

Variable:

- *mod_id* is the name of the module issuing the error message.
- *member_id* is the identifier of the queue member for which the failure occurred.

Action Required: None.

2330 E *mod_id*: cl_qm_mdelete failure: member = *member_id*

Explanation: The cl_qm_mdelete function returned an error.

Variable:

- *mod_id* is the name of the module issuing the error message.
- *member_id* is the identifier of the queue member for which the failure occurred.

Action Required: None.

2331 I Unreadable label found in *location_type location_id*: logged as *vol_id*

Explanation: In the course of performing Cartridge Recovery, a cartridge with an unreadable label was discovered. No cartridge with a virtual label was recorded in this location.

Variable:

- *location_type* is the type of location (cell, drive) in which the unreadable label was detected.
- *location_id* is the specific identifier of the location (*cell_id* or *drive_id*).
- *vol_id* is a generated volume identifier of the form UL@nnn where nnn begins with 001 when Cartridge Recovery is initialized and is incremented each time an unreadable cartridge is reported. If the location is a drive, this volume identifier is recorded in the drive record.

Action Required: The unreadable cartridge is not ejected by Cartridge Recovery. If the location is a drive, the cartridge will be processed during dismount. If the location is a cell, physical removal of the unreadable cartridge may be required. Audit can be used to check the cell and will result in ejection.

2332 I Duplicate label found in *location_type location_id*:
label=*vol_id* logged as *dup_id*

Explanation: In the course of performing Cartridge Recovery, a cartridge was encountered which appears to be a duplicate. The cartridge was found unexpectedly while looking for some other cartridge, and when the recorded home cell for the unexpected cartridge was checked, the home cell contained what is presumed to be the original cartridge.

Variable:

- *location_type* is the type of location (cell, drive) in which the unreadable label was detected.
- *location_id* is the specific identifier of the location (*cell_id* or *drive_id*).
- *vol_id* is the volume identifier of the cartridge for which a duplicate was found. If the encountered label was unreadable, this may be a virtual label.
- *dup_id* is a generated volume identifier of the form DL@nnn where nnn begins with 001 when Cartridge Recovery is initialized and is incremented each time a duplicate cartridge is reported. If the location is a drive, this volume identifier is recorded in the drive record.

Action Required: The duplicate cartridge is not ejected by Cartridge Recovery. If the location is a drive, the cartridge will be processed during dismount. If the location is a cell, physical removal of the duplicate cartridge may be required.

Note that the eject command can not be used to remove the cartridge, since it would eject the original rather than the duplicate, and no record exists for the generated volume identifier.

2334 I Found volume *vol_id* in *location* will check *home_cell_id* when lsm *lsm_id* comes online.

Explanation: In the course of performing Cartridge Recovery, a cartridge was encountered unexpectedly in a storage cell. When attempting to check the recorded home cell for that cartridge, the home LSM was found to be offline or inaccessible. The cartridge may be a duplicate, but that could not be determined at this time. The recorded home cell is marked as reserved, which will cause it to be checked when the LSM comes online. The volume record is updated to reflect the new location in which it was found.

Variable:

- *vol_id* is the volume identifier of the cartridge.
- *location* is the location in which the cartridge was found.
- *home_cell_id* is the recorded home cell for the cartridge.
- *lsm_id* is the identifier of the LSM containing the recorded home cell.

Action Required: None. When the LSM containing the old home cell comes online, the cell will be checked and its status corrected.

2335 I Volume *vol_id* missing, home cell was *cell_id*, drive was *drive_id*, unable to examine *location*

Explanation: This tape cartridge was not found where ACSLS expected it, but either the home cell or the drive couldn't be examined during the recovery process. The volume record will remain in the database with a missing status until ACSLS can examine all recorded locations.

Variable:

- *vol_id* is the volume identifier of the missing cartridge.
- *cell_id* is the home cell recorded for the cartridge.
- *drive_id* is the drive recorded for the cartridge.
- *location* is the location (either cell, drive, or cell and drive) that ACSLS could not examine.

Action Required: At least one recorded location could not be examined. ACSLS will automatically attempt to recover the cartridge when an LSM comes online. The missing status will be resolved when:

- The cartridge is found in one of the recorded locations by Cartridge Recovery. The volume record will be updated to reflect the location of the cartridge.
- Cartridge Recovery is able to check all recorded locations, and the cartridge is not found. In this case, the volume record will be deleted.·
- Manual Volume Delete is used to delete the volume record from the database.

2336 I Volume *vol_id* was not found and will be deleted

Explanation: This tape cartridge was not found in any location recorded by ACSLS. The volume record will be deleted from the database. This message will be followed by a 1054 I message that specifies the home cell and drive id which were recorded for this volume.

Variable: *vol_id* is the volume identifier of the cartridge that will be deleted.

Action Required: None

.**2338 E** *mod_id*: Invalid volume id *vol_id*

Explanation: This messages is issued when an invalid volume ID is entered.

Variable:

- *mod_id* is the name of the module issuing the error message.
- *vol_id* is the identifier of the volume that was found.

Action Required: Reenter the command with the correct volume ID.

2339 E Volume *vol_id*: Media type mismatch, recorded as *media_type*, read as *media_type*.

Explanation: The media type of the specified volume is recorded differently in the database than what was returned from a physical catalog of the volume's location. This could possible indicate that a label has fallen off.

Variable:

- *vol_id* is the volume serial number found by Cartridge Recovery.
- *media_type* is the jvolume's media type designator.

Action Required: Cartridge may need to be relabeled. Operator intervention may be necessary.

2340 E surr_main (*PID #####*): Unable to set SO_REUSEADDR on SURROGATE LISTENER socket *NNNNN*

Explanation: The Surrogate main routine was unable to set the SO_REUSEADDR option on the socket using the setsockopt() system call. This option allows the socket at that port number to be reused if it still exists as can be the case if ACSLS is restarted soon after it was stopped. IPC Surrogate terminates.

Variable:

- ##### is the Process ID of the Surrogate issuing the error.
- *NNNNN* is the port number that the Surrogate is trying to set the option on.

Action Required:

1. Look for associated errors that may indicate why the setsockopt call failed.
2. Kill the ACSLS system using the kill.acsls command,
3. Then kill any additional “zombie” ACSLS processes (using a ps | grep acs).
4. See if the socket is in use (possibly by another process) with a netstat –a | grep *NNNNN* where *NNNNN* is the socket number shown in the error message.
5. If the socket is in use, wait for a few minutes to see if the socket eventually times out. Then restart ACSLS with the rc.acsss command.

It may be necessary to reboot the ACSLS host to release any hung sockets.

6. If this does not fix the problem, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2341 E surr_main (*PID* #####): Unable to bind SURROGATE LISTENER socket *NNNNN*

Explanation: The Surrogate main routine was unable to bind the main listener socket that it uses to accept requests from the Gateway on using the bind() system call. Each Surrogate has a unique port number it is trying to bind to. IPC Surrogate terminates.

Variable:

- ##### is the Process ID of the Surrogate issuing the error.
- *NNNNN* is the port number that the Surrogate is trying to bind() to.

Action Required:

1. Look for associated errors that may indicate why the bind() call failed.
2. Kill the ACSLS system using the kill.acsls command.
3. Then kill any additional “zombie” ACSLS processes (using a ps | grep acs).
4. See if the socket is in use (possibly by another process) with a netstat –a | grep *NNNNN* where *NNNNN* is the socket number shown in the error message.
5. If the socket is in use, wait for a few minutes to see if the socket eventually times out. Then restart ACSLS with the rc.acsss command.

It may be necessary to reboot the ACSLS host to release any hung sockets.

6. If this does not fix the problem, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2342 E surr_main (*PID* #####): Listen error on SURROGATE LISTENER socket *NNNNN*

Explanation: The Surrogate main routine was unable to complete a listen() system call on the main listener socket that it uses to accept requests from the Gateway. Each Surrogate has a unique port number it is trying to listen() to. IPC Surrogate terminates.

Variable:

- ##### is the process ID of the Surrogate issuing the error.
- *NNNNN* is the port number that the Surrogate is trying to listen() to.

Action Required:

1. Look for associated errors that may indicate why the listen() call failed.
2. Kill the ACSLS system using the kill.acsls command**.**
3. Then kill any additional “zombie” ACSLS processes (using a ps | grep acs).
4. See if the socket is in use (possibly by another process) with a netstat –a | grep *NNNNN* where *NNNNN* is the socket number shown in the error message.
5. If the socket is in use, wait for a few minutes to see if the socket eventually times out. Then restart ACSLS with the rc.acsss command.

It may be necessary to reboot the ACSLS host to release any hung sockets.

6. If this does not fix the problem, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2343 I *PID #####* surr_main (*PID #####*): Surrogate listening on port *NNNNN* SURROGATE_QUEUE_AGE is set to *NN* minutes SURROGATE_TIMEOUT is set to *NNN* seconds TRACING is <ON/OFF> QUEUE currently has *NN* active requests

Explanation: This message indicates what socket port the Surrogate is listening on to receive ACSLS requests from a Library Management Gateway system. It is issued when the Surrogate starts and has successfully created, bound, and is actively listening on the socket. Also shown are the current values that the program is using for SURROGATE_QUEUE_AGE and SURROGATE_TIMEOUT. These two variables and the SURROGATE_PORT are dynamic environment variables set in the acsss_config program. Also displayed is whether program tracing is set “on” or “off”. Finally, the number of requests that are currently on the queue is shown. This message is also displayed when the program receives a SIGHUP signal (i.e., kill –hup #####). The Surrogate continues running.

Variable:

- ##### is the Process ID of the Surrogate issuing the message.
- *NNNNN* is the number of the port on which the Surrogate is listening.
- *NN* is the number of minutes that SURROGATE_QUEUE_AGE is set to.
- *NNN* is the number of seconds until SURROGATE_TIMEOUT. takes effect.
- *NN* is the number of active requests in the **QUEUE**

Action Required: None. This message is informational only.

2344 E `surr_main (PID #####): Socket initialization failed for SURROGATE LISTENER socket NNNNN; rc=XX`

Explanation: The Surrogate main routine was unable to complete a listen() system call on the main listener socket that it uses to accept requests from the Library Management Gateway. Each Surrogate has a unique port number it is trying to listen() to. IPC Surrogate terminates.

Variable:

- ##### is the Process ID of the Surrogate issuing the error.
- *NNNNN* is the port number that the Surrogate is trying to listen() to.
- *XX* is the return code from the listen() call.

Action Required:

1. Look for associated errors that may indicate why the listen() call failed.
2. Kill the ACSLS system using the kill.acsls command.
3. Then kill any additional “zombie” ACSLS processes (using a ps | grep acs).
4. See if the socket is in use (possibly by another process) with a netstat –a | grep *NNNNN* where *NNNNN* is the socket number shown in the error message.
5. If the socket is in use, wait for a few minutes to see if the socket eventually times out. Then restart ACSLS with the rc.acsss command.

Hint: It may be necessary to reboot the ACSLS host to release any hung sockets.

6. If this does not fix the problem**,** collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2345 W `surr_handler (PID #####): Due to above error, packet is dropped & GATEWAY CONNECTED socket (NNNNN) closed`

Explanation: The Surrogate handler routine encountered an error earlier, which rendered the current ACSLS request unable to run to completion. Consequently, the Surrogate is forced to abort that particular request packet and close the socket that it was using to communicate with the Library Management Gateway servlet (the `GATEWAY CONNECTED` socket). This error is not considered fatal to the Surrogate. PC Surrogate closes the socket, removes the queue entry, and continues running.

Variable:

- `#####` is the process ID of the Surrogate issuing the error.
- *NNNNN* is the socket number that the Surrogate has closed.

Action Required:

1. Look for an error message preceding this one that caused the packet to be dropped and socket closed.
2. Look for other associated errors on the Gateway, Adapter, and client machines.
3. Try to identify the ACSLS command that is being sent from the originating client system.
4. If possible, re–send the offending command with tracing turned on for the Surrogate, Gateway, and Adapter.
5. If this does not fix the problem, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2346 E surr_handler (*PID #####*): Write of ipc data to GATEWAY CONNECTED socket *NNNNN* failed

Explanation: The Surrogate handler routine encountered an error trying to write data to the socket connected to the Library Management Gateway servlet (GATEWAY CONNECTED socket). The write() system call failed. This may have occurred because the socket prematurely closed before all the data was written. IPC Surrogate terminates.

Variable:

- ##### is the process ID of the Surrogate issuing the error.
- *NNNNN* is the socket number that the Surrogate was trying to write to.

Action Required: This could be a possible hardware or network failure.

1. Look for associated error messages preceding this one that may indicate the cause.
2. Look for other associated errors on the Gateway, Adapter, and client machines.
3. Try to identify the ACSLS command that was being sent from the originating client system.
4. If possible, re–send the offending command with tracing turned on for the Surrogate, Gateway, and Adapter.
5. If this does not fix the problem, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2347 E surr_handler (*PID #####*): Wrote *XX* rather than *YY* bytes of data to GATEWAY CONNECTED socket *NNNNN*

Explanation: The Surrogate handler routine encountered an error trying to write data to the socket connected to the Library Management Gateway servlet (GATEWAY CONNECTED socket). The write() system call could not write the expected number of bytes to the socket. This may be due to the socket's prematurely closing. IPC Surrogate terminates.

Variable:

- *#####* is the Process ID of the Surrogate issuing the error.
- *XX* is the number of bytes returned by the write() system call.
- *YY* is the number of bytes the Surrogate program attempted to write to the socket.
- *NNNNN* is the socket number that the Surrogate was trying to write to.

Action Required: This could be a possible hardware or network failure.

1. Look for associated error messages preceding this one that may indicate the cause.
2. Look for other associated errors on the Gateway, Adapter, and client machines.
3. Try to identify the ACSLS command that was being sent from the originating client system.
4. If possible, re–send the offending command with tracing turned on for the Surrogate, Gateway, and Adapter.
5. If this does not fix the problem, collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2348 E `surr_handler (PID #####): Unable to create a GATEWAY CONNECTED socket via ACCEPT (SURROGATE LISTENER NNNNN)`

Explanation: The Surrogate handler routine was unable to complete an accept() system call on the main listener socket that it uses to accept requests from a Gateway servlet. Each Surrogate has a unique port number it is trying to listen() to. A new socket connection for the Gateway servlet is created as a result of a successful accept() call known as a `GATEWAY CONNECTED` socket. IPC Surrogate terminates.

Variable:

- `#####` is the Process ID of the Surrogate issuing the error.
- *NNNNN* is the port number that the Surrogate is trying to listen() to.

Action Required:

1. Look for associated errors that may indicate why the accept() call failed.
2. Kill the ACSLS system using the kill.acsls command.
3. Then kill any additional “zombie” ACSLS processes (using a ps | grep acs and kill –9 the appropriate ids.
4. See if the socket is in use (possibly by another process) with a netstat –a | grep *NNNNN* where *NNNNN* is the socket number shown in the error message.
5. If the socket is in use, wait for a few minutes to see if the socket eventually times out. Then restart ACSLS with the rc.acsss command.

It may be necessary to reboot the ACSLS host to release any hung sockets.

6. Also look for exceeding UNIX system limits on sockets, file descriptors, or other network resources.
7. If this does not fix the problem, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1

Messages manual). Then contact StorageTek Software Support.

2349 E `surr_read_socket (PID #####): "Read failed on GATEWAY CONNECTED socket NNNNN`

Explanation: The Surrogate read socket routine was unable to complete an read() system call on the socket that it uses to accept requests from a Library Management Gateway servlet. Each Surrogate has a unique port number it is trying to listen() to. A new socket connection for the Gateway servlet is created as a result of a successful accept() call known as a `GATEWAY CONNECTED` socket. The `GATEWAY CONNECTED` socket is closed and the IPC Surrogate continues running.

Variable:

- `#####` is the process ID of the Surrogate issuing the error.
- *NNNNN* is the port number that the Surrogate is trying to read() from.

Action Required:

1. Look for associated errors that may indicate why the read() call failed.
2. Kill the ACSLS system using the kill.acsls command.
3. Then kill any additional “zombie” ACSLS processes (using a ps | grep acs and kill –9 the appropriate ids).
4. See if the socket is in use (possibly by another process) with a netstat –a | grep *NNNNN* where *NNNNN* is the socket number shown in the error message.
5. If the socket is in use, wait for a few minutes to see if the socket eventually times out. Then restart ACSLS with the rc.acsss command.

   Note: It may be necessary to reboot the ACSLS host to release any hung sockets. This may be a result of a timeout of the command and increasing network timeout parameters may alleviate the condition.

6. If this does not fix the problem, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2350 E surr_read_socket (*PID #####*): "Read *X* bytes from GATEWAY CONNECTED socket (*NNNNN*) but expected *Y*

Explanation: The Surrogate read socket routine was unable to complete an read() system call on the socket that it uses to accept requests from a Library Management Gateway servlet. Each Surrogate has a unique port number it is trying to listen() to. A new socket connection for the Gateway servlet is created as a result of a successful accept() call known as a GATEWAY CONNECTED socket. It was trying to read *Y* number of bytes but only read *X* number of bytes. Surrogate continues running.

Variable:

- ##### is the Process ID of the Surrogate issuing the error.
- *NNNNN* is the port number that the Surrogate is trying to read() from.
- *X* is the number of bytes that were successfully read.
- *Y* is the number of bytes that it was trying to read.

Action Required:

1. Look for associated errors that may indicate why the read() call failed.
2. Kill the ACSLS system using the kill.acsls command.
3. Then kill any additional “zombie” ACSLS processes (using a ps | grep acs and kill –9 the appropriate ids).
4. See if the socket is in use (possibly by another process) with a netstat –a | grep *NNNNN* where *NNNNN* is the socket number shown in the error message.

5. If the socket is in use, wait for a few minutes to see if the socket eventually times out. Then restart ACSLS with the rc.acsss command.

   Note: It may be necessary to reboot the ACSLS host to release any hung sockets. This may be a result of a timeout of the command and increasing network timeout parameters may alleviate the condition.

6. If this does not solve the problem, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2351 E `surr_handler (`*`PID #####`*`):  select() call failed on GATEWAY CONNECTED socket (`*`NNNNN`*`)`

Explanation: The Surrogate handler routine failed on a select() system call. This routine blocks on the socket that it uses to accept requests from a Library Management Gateway servlet and on the socket it uses to communicate with the acslm process. Each Surrogate has a unique port number it is trying to listen() to. A new socket connection for the Library Management Gateway servlet is created as a result of a successful accept() call known as a `GATEWAY CONNECTED` socket. IPC Surrogate terminates.

Variable:

- *`#####`* is the Process ID of the Surrogate issuing the error.
- *`NNNNN`* is the port number for the Gateway connected to the Surrogate.

Action Required:

1. Look for associated errors that may indicate why the select() call failed.
2. See if the acslm process failed.
3. Check for the Gateway port by looking for it with the netstat –a | grep *`NNNNN`*.

4. Kill the ACSLS system using the kill.acsls command.
5. Then kill any additional “zombie” ACSLS processes (using a ps | grep acs and kill –9 the appropriate ids.
6. See if the socket is in use (possibly by another process) with a netstat –a | grep *NNNNN* where *NNNNN* is the socket number shown in the error message.
7. If the socket is in use, wait for a few minutes to see if the socket eventually times out. Then restart ACSLS with the rc.acsss command.

   Note: It may be necessary to reboot the ACSLS host to release any hung sockets.
8. Also look for exceeding UNIX system limits on sockets, file descriptors, or other network resources.
9. If this does not solve the problem, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2352 W surr_handler (*PID #####*): COMMAND (ACK | INTERMEDIATE | FINAL) response discarded because original socket connection is no longer on the queue. Advise increasing SURROGATE_QUEUE_AGE.

Explanation: The ACSLS library manager returned a response to the Surrogate handler routine for the COMMAND shown, but the Surrogate could not find the outstanding request and socket connection on its queue, so its only alternative was to report the problem and discard (ignore) the response from the library manager. This may result from the library's taking too long to execute commands. For example, a mount or dismount may be taking an exceedingly long time because of hardware errors, a drive being cleaned before mounting, cartridges too far from the requested drive (i.e., different LSM), or other conditions. After a few minutes have passed (SURROGATE_QUEUE_AGE), the request on the queue is considered "stale" and removed from the queue. Eventually, when the library finally mounts or dismounts the tape, the FINAL response packet from the library manager can no longer be found on the queue and transmitted to the client. The Surrogate continues running.

Variable:

- COMMAND is the ACS command for which the Surrogate could not find an outstanding request and socket connection.
- SURROGATE_QUEUE_AGE is the dynamic environment variable that controls how long the Surrogate keeps requests on its queue.

Action Required:

1. Look for any unusual conditions that may cause ACS commands to be delayed (see the explanation above).
2. Determine if the hardware is malfunctioning or misconfigured.
3. To increase the amount of time that the Surrogate keeps requests on its queue, increase the SURROGATE_QUEUE_AGE

dynamic environment variable with the acsss_config program.

4. Restart the Surrogate to enable the change to take effect.

2353 E `surr_query_server (PID #####): Surrogate process unable to issue query server (NN seconds)`

Explanation: The `Surrogate` issues a `"Query Server"` request to the library manager when it starts running to be sure the library manager is ready to receive requests and before the `Surrogate` begins accepting requests from the Library Management Gateway socket. The `Surrogate` is expecting the server to be in `RUN` or `RECOVERY` mode. After waiting the number of seconds shown, the `Surrogate` determined that the `"Query Server"` could not be completed and gave up. The `Surrogate` abnormally terminates and is automatically restarted (up to 10 times) by the `acsss_daemon`.

Variable:

- `#####` is the Process ID of the Surrogate issuing the error.
- *NN* is the number of seconds

Action Required:

1. Look for errors in the acsss_event.log that may explain why a `"query server"` request cannot be completed.
2. Try the `"Query Server"` request in `cmd_proc`.

2354 W `surr_query_server (PID #####): Surrogate waiting for ACSLS to come up`

Explanation: The Surrogate issues a "Query Server" request to the library manager when it starts running to be sure the library manager is ready to receive requests and before the Surrogate opens the Library Management Gateway listening socket to begin accepting requests. The Surrogate is expecting the server to be in `RUN` or `RECOVERY` mode. The Surrogate will issue this message every 30 seconds (for up to 10 minutes) till a "Query Server" returns that it is in `RUN` or `RECOVERY` mode. Once it is in `RUN` or `RECOVERY` mode, the Surrogate will continue coming up. If 10 minutes passes, then the surrogate will abnormally terminate with error 2353.

Note that this can occur if the system starts up in `IDLE` mode.

Variable: `#####` is the Process ID of the Surrogate issuing the error.

Action Required:

1. Look for errors in the acsss_event.log that may explain why a `query server` isn't in `RUN` or `RECOVERY` mode.
2. Try the `query server` request in `cmd_proc`.
3. Check to see if ACSLS is set to automatically start in `IDLE` mode using the `acsss_config` program.
4. If the system is in `IDLE` mode, issue a `START` command.

2355 E "ss_main: Too many SURROGATE processes specified through acsss_config. The maximum is 10 SURROGATE processes

Explanation: The acsss_daemon read the SURROGATE_PROCESSES dynamic environment variable in order to know how many surrogate processes to start. The number exceeds ten (10), the maximum allowed. ACSLS terminates.

Variable: SURROGATE_PROCESSES is the dynamic environment variable that controls the number of surrogate processes running.

Action Required: The range for the dynamic environment variable SURROGATE_PROCESSES has been set greater than the Surrogate program currently supports. Define the SURROGATE_PROCESSES variable with the acsss_config program to be a number less than 10.

2356 W surr_handler (PID #####): *NN* surrogate requests (open socket) being processed; cannot accept more until some finish. Advise reducing SURROGATE_QUEUE_AGE.

Explanation: The surrogate handler routine was unable to complete an accept() system call on the main listener socket that it uses to accept requests from a Library Management Gateway servlet. Each SURROGATE has a unique port number it is trying to listen() to. A successful accept() call (known as a GATEWAY CONNECTED socket) creates a new socket connection for the Gateway servlet. The error code (errno) and message returned by the accept() system call is "24 – TOO MANY OPEN FILES".

The SURROGATE will disregard the Library Management Gateway's attempt to connect its servlet to a SURROGATE socket. As requests are completed and open socket connections are closed, future attempts to connect will complete successfully. The SURROGATE will not abort on this error. Since it is possible for the Library Management Gateway to continue connection

attempts (and fill the acsss_event.log), this error message will be displayed in the acsss_event.log no more often than every five (5) minutes. The SURROGATE continues running.

Variable:

- ##### is the process ID of the SURROGATE issuing the error.
- *NN* is the number of open sockets.
- SURROGATE_QUEUE_AGE is the dynamic environment variable that controls the length of time a request remains in the queue.

Action Required: Generally the problem is that the Library Management Gateway has sent more requests than the ACSLS system can process (or has sent them too fast) or that the ACSLS library system is processing the requests too slowly. Thus, the SURROGATE has reached the maximum limit of open files (sockets).

1. Look for errors in the acsss_event.log that may show indicate hardware or configuration errors.
2. Also try a `query request all` command in `cmd_proc` to see how many requests ACSLS are outstanding.
3. Check client software to see if many mount and dismount requests are being sent.
4. It may also be necessary to reduce the amount of time that the SURROGATE keeps outstanding requests on its queue. Reduce the SURROGATE_QUEUE_AGE dynamic environment variable with the `acsss_config` program.
5. Restart the SURROGATE so that the change can take effect.

2361 N Volume *vol_id*: Media type incompatible with L5500. Not entered.

Explanation: This message pertains to L5500 LSMs only; it indicates an attempt to enter an incompatible cartridge into an L5500 CAP. Only LTO and StorageTek 9840/9940 cartridges are compatible with L5500 LSMs. Requests to enter incompatible media are rejected.

Variable: *vol_id* is the volume entered into the CAP.

Action Required:

- Remove the cartridge from the CAP.
- Substitute an LTO or StorageTek 9840/9940 cartridge.

2362 N Cell *cell_id* contains incompatible media: must be manually removed

Explanation: This message pertains to L5500 LSMs only. The message indicates that an audit found a cartridge that is neither an LTO cartridge nor a StorageTek 9840 or 9940 cartridge in an L5500 panel. Only LTO and StorageTek 9840/9940 cartridges are compatible with L5500 LSMs. (This may have been caused by someone physically entering the LSM and manually placing the cartridge in the panel.)

Variable: *cell_id* is the cell in the L5500 containing the incompatible cartridge.

Action Required: Physically enter the L5500 and manually remove the incompatible cartridge.

2363 E Request emergency software license key from the StorageTek web site. Go to Customer Resource Center, Tools and Services, Emergency Software Key.

Explanation: Software license key validation has failed due to an invalid or nonexistent key, an expired key, or because the cartridge count exceeded the library's licensed capacity.

Action Required: Follow the directions in the message to obtain an emergency software key. Contact your sales account representative to obtain a valid periodic software license key.

Note: This may result in additional charges if the software license has expired or if the cartridge count exceeds the library's current licensed capacity.

2400 E EXEC SQL select failed on table *table_name*.

Explanation: An ODBC call to prepare an SQL statement for selecting records from table *table_name* has failed.

Variable: *table_name* is the name of the table from which the records were to be selected.

Action Required:

- Restart the application server.
- If the problem persists, restart the database.
- If the problem persists, contact your System Administrator.

2401 E `XML Error (error_message) with error code (code).`

Explanation: An XML Exception has occurred.

Variable:

- *error_message* is the XML Exception message.
- *code* is the error code from the XML Exception.

Action Required:

- Check the validity of the XML in the Request.

2402 E `XML Parsing Error (error_message).`

Explanation: An SAX Exception has occurred in parsing the XML.

Variable: *error_message* is the SAX Exception message.

Action Required: Check the validity of the XML in the Request.

2403 E `Invalid DISPLAY type detected.`

Explanation: The type in the display response packet is invalid.

Variable: None.

Action Required:

- Retain the request XML and the response from the display processor.
- Contact StorageTek Software Support.

2404 I `Display tables could not be loaded.`

Explanation: The display reference talbes could not be loaded into the database during configuration.

Variable: None.

Action Required:

- Restart the database.
- If the problem persists, contact your System Administrator.

2405 E `EXEC SQL Cannot create database handle`

Explanation: An ODBC call to create a handle to query the database has failed.

Variable: None.

Action Required:

- Restart the application server.
- If the problem persists, restart the database.
- If the problem persists, contact your System Administrator.

2406 E `EXEC SQL Cannot register variables`

Explanation: An ODBC call to specify the variables to store the records from the database has failed.

Variable: None.

Action Required:

- Restart the application server.
- If the problem persists, restart the database.
- If the problem persists, contact your System Administrator.

2407 E Unexpected XML parsing error occurred

Explanation: An unexpected parsing error occurred in the XML4c APIs.

Variable: None.

Action Required:

- Restart the application server.
- If the problem persists, collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.
- If the problem persists, contact your System Administrator.

2408 I acsdisp failed, database query string too long.

Explanation: The database query is too long to be passed through ODBC to query the database.

Variable: None.

Action Required: Please enter a shorter query.

2420 E EXEC SQL failed to fetch from *cursor*.

Explanation: An ODBC call to prepare an SQL statement for fetching a row from the database with the *cursor* has failed.

Variable: *cursor* is the database handle for executing SQL statement.

Action Required: The application server has to be re–started. Contact your System Administrator.

2421 W DB status [*err_num*] detected on update for client id *client_id*

Explanation: An attempt to update a client record in the database has failed.

Variable:

- *err_num* is the error number.
- *client_id* is the identifier of the client to be deleted.

Action Required:

- Restart the application server and see if the problem persists.
- If it does, restart the database and see if the problem persists.
- If it does, collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2422 W DB status [*err_num*] detected on insert for client id *clnt_id*

Explanation: An attempt to insert a client record into the database has failed.

Variable:

- *err_num* is the error number.
- *clnt_id* is the identifier of the client to be deleted.

Action Required:

- Restart the application server and see if the problem persists.
- If it does, restart the database and see if the problem persists.
- If it does, collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of

this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2423 E `EXEC SQL failed to insert client_id` *`clnt_id`* `into clienttable`

Explanation: An ODBC call to prepare an SQL statement for inserting a client record into the database has failed.

Variable: *`clnt_id`* is the identifier of the client to be deleted.

Action Required:

- Restart the application server and see if the problem persists.
- If it does, restart the database and see if the problem persists.
- If it does, collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2424 E `EXEC SQL lock timeout on update of clienttable where client_id =` *`clnt_id`*

Explanation: An attempt to update a locked client record from clienttable has failed.

Variable: *`clnt_id`* is the identifier of the client to be deleted.

Action Required:

- Restart the application server and see if the problem persists.
- If it does, restart the database and see if the problem persists.
- If it does, collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2425 E EXEC SQL failed to update clienttable where client_id = *clnt_id*

Explanation: An ODBC call to prepare an SQL statement for updating a client record has failed.

Variable: *clnt_id* is the identifier of the client to be deleted.

Action Required:

- Restart the application server and see if the problem persists.
- If it does, restart the database and see if the problem persists.
- If it does, collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2426 E DB status [*err_num*] detected on *operation* for *lib_cmpnt cmpnt_id*

Explanation: An attempt to perform a database operation like the insertion, deletion or updating of a library component *lib_cmpnt*, e.g., LMU or PTP or HAND or PANEL with an identifier *cmpnt_id*, e.g., 0,0(lmu_id) or 0,0,0(panel_id or ptp_id) or 0,0,0,0(hand_id), has failed.

Variable:

- *err_num* is the error number.
- *lib_cmpnt* is the library component type, e.g., LMU, PTP, HAND or PANEL.
- *cmpnt_id* is the identifier of a library component, e.g., 0,0(lmu_id) or 0,0,0(ptp_id or panel_id) or 0,0,0,0(hand_id).

Action Required:

- Restart the application server and see if the problem persists.

- If it does, restart the database and see if the problem persists.
- If it does, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2427 E EXEC SQL lock timeout on delete from *table_name* where *lib_cmpnt* = *cmpnt_id*

Explanation: An attempt to delete a locked a record from the *table_name*, e.g., lmutable, ptptable or handtable for a library component *lib_cmpnt*, e.g., LMU, PTP or HAND with an identifier *cmpnt_id*, e.g., 0,0(lmu_id) or 0,0,0(ptp_id) or 0,0,0,0(hand_id), has failed.

Variable:

- *table_name* is the name of the database table from which row has to be deleted.
- *lib_cmpnt* is library component type, e.g., LMU, PTP or HAND.
- *cmpnt_id* is the identifier of the library component, e.g., 0,0(lmu_id) or 0,0,0(ptp_id) or 0,0,0,0(hand_id).

Action Required:

- Restart the application server and see if the problem persists.
- If it does, restart the database and see if the problem persists.
- If it does, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2428 E EXEC SQL delete from *table_name* failed, where *lib_cmpnt* = *cmpnt_id*

Explanation: An ODBC call to prepare an SQL statement for deleting a record from the *table_name*, e.g., lmutable, ptptable or handtable for a library component, e.g., LMU, PTP or HAND with an identifier *cmpnt_id*, e.g., 0,0(lmu_id) or 0,0,0(ptp_id) or 0,0,0,0(hand_id), has failed.

Variable:

- *table_name* is the name of the database table from which row has to be deleted.
- *lib_cmpnt* is library component type, e.g., LMU, PTP or HAND.
- *cmpnt_id* is the identifier of a library component, e.g., 0,0(lmu_id) or 0,0,0(ptp_id) or 0,0,0,0(hand_id).

Action Required:

- Restart the application server and see if the problem persists.
- If it does, restart the database and see if the problem persists.
- If it does, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2429 E EXEC SQL select from *table_name* failed, where *lib_cmpnt* = *cmpnt_id*

Explanation: An ODBC call to prepare an SQL statement for selecting a record from the *table_name*, e.g., lmutable, ptptable or handtable for a library component, e.g., LMU, PTP or HAND with an identifier *cmpnt_id*, e.g., 0,0(lmu_id) or 0,0,0(ptp_id) or 0,0,0,0(hand_id), has failed.

Variable:

- *table_name* is the name of the database table from which row has to be deleted.
- *lib_cmpnt* is library component type, e.g., LMU, PTP or HAND.
- *cmpnt_id* is the identifier of a library component, e.g., 0,0(lmu_id) or 0,0,0(ptp_id) or 0,0,0,0(hand_id).

Action Required:

- Restart the application server and see if the problem persists.
- If it does, restart the database and see if the problem persists.
- If it does, collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2430 E Table *table_name* loading failed.

Explanation: ACSLS loads Access Control data files to temporary database tables before rebuilding the Access Control database tables. This message indicates that an attempt to load an Access Control data file to the specified temporary Access Control database table has failed.

Variable: *table_name* is the name of the Access Control temporary database table.

Action Required:

- If ACSLS is running, execute `acsss_config` as user "acsss" and select the option to rebuild the Access Control tables.
- If ACSLS is not running, execute `rc.acsss` as user "acsss".
- If the problem persists, collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on

page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2431 E Table *table_name* rebuilding failed.

Explanation: To ensure that the Access Control database tables are locked while they are rebuilt, ACSLS loads Access Control data files to temporary database tables and uses the temporary tables to rebuild the Access Control database tables. This message indicates that an attempt to rebuild a specified Access Control database table has failed.

Variable: *table_name* is the name of the Access Control database table that ACSLS failed to rebuild.

Action Required:

- If ACSLS is running, execute `acsss_config` as user "acsss" and select the option to rebuild the Access Control tables.
- If ACSLS is not running, execute rc.acsss as user "acsss".
- If the problem persists, collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2432 I Access Control tables have been rebuilt.

Explanation: ACSLS has successfully rebuilt the Access Control tables.

Variable: None.

Action Required: None. This message is informational only.

2440 E EXEC SQL lock timeout: on insert into *table_name*, where *identifier* = *id*

Explanation: An attempt to insert a record into the locked table *table_name*, e.g., clienttable, lmutable, ptptable, paneltable or handtable, where identifier *identifier*, e.g., client_id, lmu_id, ptp_id, panel_id or hand_id with a value of *id* e.g., client1 (client_id) or 0,0(lmu_id) or 0,0,0(ptp_id or panel_id) or 0,0,0,0(hand_id), has failed.

Variable:

- *table_name* is the name of the database table from which row has to be deleted.
- *identifier* is an identifier, e.g., client_id, lmu_id, ptp_id, panel_id or hand_id.
- *id* is the value of an identifier, e.g., client1(client_id), 0,0(lmu_id) or 0,0,0(ptp_id or panel_id) or 0,0,0,0(hand_id).

Action Required:

- Restart the application server and see if the problem persists.
- If it does, restart the database and see if the problem persists.
- If it does, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2441 E EXEC SQL failed lock to insert into *table_name*, where *identifier* = *id*

Explanation: An ODBC call to prepare an SQL statement to insert a record into table *table_name*, e.g., lmutable, ptptable, paneltable or handtable, where identifier *identifier*, e.g., lmu_id, ptp_id, panel_id or hand_id with a value of *id*, e.g., 0,0(lmu_id) or 0,0,0(ptp_id or panel_id) or 0,0,0,0(hand_id), has failed.

Variable:

- *table_name* is the name of the database table from which row has to be deleted.
- *identifier* is an identifier, e.g., lmu_id, ptp_id, panel_id or hand_id.
- *id* is the value of an identifier, e.g., 0,0(lmu_id) or 0,0,0(ptp_id or panel_id) or 0,0,0,0(hand_id).

Action Required:

- Restart the application server and see if the problem persists.
- If it does, restart the database and see if the problem persists.
- If it does, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.contact StorageTek Software Support. For more information, see *Requesting Help from Software Support*.

2442 E EXEC SQL lock timeout: on update *table_name*, where *identifier = id*

Explanation: An attempt to update a record in the database for a locked table *table_name*, e.g., Imutable, ptptable, paneltable or handtable, where identifier *identifier*, e.g., Imu_id, ptp_id, panel_id or hand_id with a value of id, e.g., 0,0(lmu_id) or 0,0,0(ptp_id or panel_id) or 0,0,0,0(hand_id), has failed.

Variable:

- *table_name* is the name of the database table from which row has to be deleted.
- *identifier* is an identifier, e.g., lmu_id, ptp_id, panel_id or hand_id.
- *id* is the value of an identifier, e.g., 0,0(lmu_id) or 0,0,0(ptp_id) or panel_id) or 0,0,0,0(hand_id).

Action Required:

- Restart the application server and see if the problem persists.
- If it does, restart the database and see if the problem persists.
- If it does, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2443 E EXEC SQL update of *table_name* failed, where *identifier = id*

Explanation: An ODBC call to prepare an SQL statement for updating a record in the database for the table *table_name*, e.g., lmutable, ptptable, paneltable or handtable, where identifier *identifier*, e.g., lmu_id, ptp_id, panel_id or hand_id with a value of *id*, e.g., 0,0(lmu_id) or 0,0,0(ptp_id or panel_id) or 0,0,0,0(hand_id), has failed.

Variable:

- *table_name* is the name of the database table from which a row has to be deleted.
- *identifier* is an identifier, e.g., lmu_id, ptp_id, panel_id or hand_id.
- *id* is the value of an identifier, e.g., 0,0(lmu_id) or 0,0,0(ptp_id or panel_id) or 0,0,0,0(hand_id).

Action Required:

- Restart the application server and see if the problem persists.
- If it does, restart the database and see if the problem persists.
- If it does, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2444 E EXEC SQL fetch from handtable failed

Explanation: An ODBC call to prepare an SQL statement for fetching a record from handtable has failed.

Action Required:

- Restart the application server and see if the problem persists.
- If it does, restart the database and see if the problem persists.
- If it does, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2445 E PTP *ptp_id*, configuration failed to verify

Explanation: ACSLS has discovered a mismatch between hardware and the database during recovery. PTP information needs to be added to or deleted from the database.

Variable: The PTP identifier is *ptp_id*.

Action Required: After recovery processing terminates, rerun the library server `acsss_config` program to redefine the library configuration in the database (see the *Installation and Configuration Guide* for your platform).

2446 E Hand *hand_id*, configuration failed to verify

Explanation: ACSLS has discovered a mismatch between hardware and the database during recovery. Hand information needs to be added to or deleted from the database.

Variable: The HAND identifier is *hand_id*.

Action Required: After recovery processing terminates rerun the library server `acsss_config` program to redefine the library configuration in the database (see the *Installation and Configuration Guide* for your platform).

2447 I *lib_cmpnt cmpnt_id* is operative.

Variable:

- *lib_cmpnt* is the library component type, e.g., PTP, HAND, DRIVE or CAP.
- *cmpnt_id* is the identifier of a library component, e.g., 0,0,0(ptp_id) or 0,0,0,0(hand_id) or 0,0,0(cap_id) or 0,0,7,1(drive_id).

Action Required: None. This message is informational only.

2448 W *lib_cmpnt cmpnt_id* `is inoperative.`

Explanation: This message is issued when the library component *lib_cmpnt*, e.g., PTP, HAND, DRIVE or CAP, with an identifier *cmpnt_id*, e.g., 0,0,0(ptp_id) or 0,0,0,0(hand_id) or 0,0,0(cap_id) or 0,0,7,1(drive_id), becomes inoperative.

Variable:

- *lib_cmpnt* is the library component type, e.g., PTP, HAND, DRIVE or CAP.
- *cmpnt_id* is the identifier of a library component, e.g., 0,0,0(ptp_id) or 0,0,0,0(hand_id) or 0,0,0(cap_id) or 0,0,7,1(drive_id).

Action Required: None.

2449 I `CAP` *cap_id* `CAP door closed.`

Explanation: This message is issued when the door of CAP with value *cap_id* is closed.

Variable: *cap_id* is the CAP whose access door is closed.

Action Required: None. This message is informational only.

2450 I *lib_cmpnt cmpnt_id* `serial number changed.`

Explanation: This message indicates that there is a change in serial number for a library component, e.g., LSM or drive, with an identifier *cmpnt_id* , e.g., 0,0(lsm_id) or 0,0,7,1(drive_id).

Variable:

- *lib_cmpnt* is the library component type, e.g., LSM or DRIVE.
- *cmpnt_id* is the identifier of a library component, e.g., 0,0(lsm_id) or 0,0,7,1(drive_id).

Action Required: None. This message is informational only.

2451 I Drive *drive_id* type changed.

Explanation: The type is changed for the DRIVE identifier with the value *drive_id*.

Variable: *Drive_id* is the value of the DRIVE identifier.

Action Required: None. This message is informational only.

2452 I LMU *lmu_id* type changed.

Explanation: The type is changed for the LMU identifier with the value *lmu_id*.

Variable: *lmu_id* is the value of the LMU identifier.

Action Required: None. This message is informational only.

2453 I LSM *lsm_id* type changed.

Explanation: The type is changed for the LSM identifier with the value *lsm_id*.

Variable: *lsm_id* is the value of LSM identifier.

Action Required: None. This message is informational only.

2454 I *lib_cmpnt cmpnt_id* added.

Explanation: A library component, e.g., DRIVE, with an identifier *cmpnt_id*, e.g., 0,0,7,1(drive_id), has been added to the database.

Variable:

- *lib_cmpnt* is the library component type, e.g., DRIVE.
- *cmpnt_id* is the identifier of a library component, e.g., 0,0,7,1(drive_id).

Action Required: None. This message is informational only.

2455 I *lib_cmpnt cmpnt_id* removed.

Explanation: A library component, e.g., DRIVE, with an identifier *cmpnt_id* ,e.g., 0,0,7,1(drive_id), has been removed.

Variable:

- *lib_cmpnt* is the library component type, e.g., DRIVE.
- *cmpnt_id* is the identifier of a library component, e.g., 0,0,7,1(drive_id).

Action Required: None. This message is informational only.

2456 W *lib_cmpnt cmpnt_id* maintenance required.

Explanation: A library component, e.g., LSM, with an identifier *cmpnt_id*, e.g., 0,0(lsm_id) is in maintenance mode.

Variable:

- *lib_cmpnt* is the library component type, e.g., LSM.
- *cmpnt_id* is the identifier of a library component, e.g., 0,0(lsm_id).

Action Required: Collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2457 I *lib_cmpnt cmpnt_id* HLI Compatibility Level changed.

Explanation: The HLI compatibility level has changed for a library component, e.g., ACS or LMU with an identifier *cmpnt_id*, e.g., 0(acs_id) or 0,0(lmu_id).

Variable:

- *lib_cmpn*t is the library component type, e.g., ACS or LMU.
- *cmpnt_id* is the identifier of a library component, e.g., acs_id or lmu_id.

Action Required: None. This message is informational only.

2458 I LMU *lmu_id* is now standalone.

Explanation: The status of LMU with value *lmu_id* is that of a standalone LMU.

Variable: *lmu_id* is the value of the LMU identifier.

Action Required: None. This message is informational only.

2459 I LMU *lmu_id* is now master.

Explanation: The status of LMU with value *lmu_id* is that of the master LMU.

Variable: *lmu_id* is the value of LMU identifier.

Action Required: None. This message is informational only.

2460 I LMU *lmu_id* is now standby.

Explanation: The status of the LMU with the value *lmu_id* is that of the standby LMU.

Variable: *lmu_id* is the value of LMU identifier.

Action Required: None. This message is informational only.

2461 I Server system configuration changed.

Explanation: This message is issued when the server system configuration is changed.

Action Required: None. This message is informational only.

2462 I Volume *vol_id* entered.

Explanation: This message is issued when VOLUME with value *vol_id* is entered into the library.

Variable: *vol_id* is the VOLUME identifier.

Action Required: None. This message is informational only.

2463 I Volume *vol_id* reactivated.

Explanation: This message is issued when VOLUME with value *vol_id* that was absent is reactivated.

Variable: *vol_id* is the VOLUME identifier.

Action Required: None. This message is informational only.

2464 I Volume *vol_id* ejected.

Explanation: This message is issued when VOLUME with value *vol_id* is ejected from the library.

Variable: *vol_id* is the VOLUME identifier.

Action Required: None. This message is informational only.

2465 I Volume *vol_id* absent.

Explanation: This message is issued when VOLUME with value *vol_id* is marked absent.

Variable: *vol_id* is the VOLUME identifier.

Action Required: None. This message is informational only.

2466 W Cleaning cartridge *vol_id* usage limit exceeded.

Explanation: A cleaning cartridge with the value *vol_id* has exceeded its maximum usage limit.

Variable: *vol_id* is the VOLUME identifier.

Action Required: None. This message is informational only.

2467 I Cleaning cartridge *vol_id* is spent.

Explanation: The cleaning capacity of the cleaning cartridge with the value *vol_id* is spent.

Variable: *vol_id* is the VOLUME identifier.

Action Required: None. This message is informational only.

2468 E *lib_cmpnt cmpnt_id* reported a Unit Attention.

Explanation: An LSM reported a Unit Attention status. This message is from the Event Notification component. Look for a preceding message from ACSLH scsilh that reports the specific Unit Attention status. The library is still operational after a Unit Attention Status is reported, but it may be in a degraded mode.

Variable:

- *lib_cmpnt* is library component type, e.g., LSM, DRIVE or CAP.
- *cmpnt_id* is the identifier of a library component, e.g., lsm_id, cap_id or drive_id.

Action Required:

1. Review the specific status reported earlier and respond to the problem reported. This may require calling StorageTek Hardware Support.
2. If this does not fix the problem,collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2469 E *lib_cmpnt cmpnt_id* reported a hardware error.

Explanation: An LSM reported a Hardware Error. This message is from the Event Notification component. Look for a preceding message from ACSLH scsilh that reports the specific hardware error. The library is still operational after a hardware error is reported, but it may be in a degraded mode.

Variable:

- *lib_cmpnt* is library component type, e.g., LSM, DRIVE or CAP.

- *cmpnt_id* is the identifier of a library component, e.g., lsm_id, cap_id or drive_id.

Action Required:

1. Review the specific status reported earlier and respond to the problem reported. This may require calling StorageTek Hardware Support.
2. If this does not fix the problem,collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2470 I LSM *lsm_id* access door closed.

Explanation: Explanation: The access door of the LSM with value *lsm_id* is closed.

Variable: *lsm_id* is the value of LSM identifier.

Action Required: None. This message is informational only.

2471 I LSM *lsm_id* access door opened.

Explanation: The access door of the LSM with value *lsm_id* is open.

Variable: *lsm_id* is the value of LSM identifier.

Action Required: None. This message is informational only.

2473 E Failed to add *lib_cmpnt cmpnt_id* into the examine list

Explanation: ACSLS discovered an internal error while examining a library component, e.g., LSM, CAP or drive. To avoid recursive examines, each component being examined is added to a list. This error is reported when a failure in memory allocation prevents the addition of a component to the list.

Variable:

- *lib_cmpnt* is the library component type, e.g., LSM, DRIVE or CAP.
- *cmpnt_id* is the identifier of a library component, e.g., lsm_id, cap_id or drive_id.

Action Required:

- Restart ACSLS.
- If the error continues to be reported, collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2474 E Failed to delete *lib_cmpnt cmpnt_id* from the examine list

Explanation: ACSLS discovered an internal error while examining library component, e.g., LSM, CAP or drive. The compenent is deleted from the examine list when the examine is completed. This error message indicates that the component has not been deleted from the list.

Variable:

- *lib_cmpnt* is the library component type, e.g., LSM, DRIVE or CAP.
- *cmpnt_id* is the identifier of a library component, e.g., lsm_id, cap_id or drive_id.

Action Required:

- Check the component indicated to see if a vary can correct the problem.
- If the error persists, collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2475 I Volume *vol_id* found in *location_type location_id*, reactivated with type=*vol_type* access_count=*access_count* pool=*pool_id* owner=*owner_id*.

Explanation: The specified volume was marked as absent or ejected in the database, but ACSLS found it in the library. The volume has been reactivated, and its critical information has been preserved.

Variable:

- *vol_id* is the absent or ejected volume.
- *location_type* is the location type (drive or cell) where the cartridge was found.
- *location_id* is the specific drive_id or cell_id where ACSLS found the cartridge.
- *vol_type* is the volume type (data, scratch, or cleaning).
- *access_count* is the access count of the volume before it was marked absent.
- *pool_id* is the pool_id to which the volume belonged before it was marked absent.
- *owner_id* is the owner of the volume before it was marked absent.

Action Required: None. This message is informational only.

2476 W Volume *vol_id*, not found in *location_type location_id* and was marked absent.

Explanation: Each volume has a home cell and ACSLS can record it as mounted on a drive. ACSLS could not find the specified volume in its recorded location(s), and it has been marked absent in the database to preserve its critical information.

Variable:

- *vol_id* is the absent volume.
- *location_type* is the location type (drive or cell) where the volume was recorded and where ACSLS could not find it.
- *location_id* is the specific drive_id or cell_id where the volume was recorded but was not found.

Action Required: None. An audit of the ACS or LSM may find the absent volume.

2477 W LSM *lsm_id* is full; volume *vol_id* cannot be recovered and is marked absent

Explanation: ACSLS found this volume in the playground/in–transit cell or in a PCP cell while recovering an LSM. It attempted to recover the volume by moving it to a new home cell in this LSM. However, the volume could not be recovered, as the LSM was full, so the volume was marked absent in the database.

Variable:

- *lsm_id* identifies the LSM being recovered.
- *vol_id* identifies the absent volume.

Action Required:

1. Eject a volume from the LSM.
2. Vary the LSM offline and back online to recover the volume.

2478 W LSM Misplaced cartridge detected, volume *vol_id* cannot be recovered and is marked absent

Explanation: ACSLS found this volume in the playground/in–transit cell or in a PCP cell while recovering an LSM. It attempted to recover the volume by moving it to a new home cell in this LSM. However, the move failed because the destination cell contained a cartridge. The volume has not been recovered and is marked absent in the database.

Variable: *vol_id* identifies the absent volume.

Action Required:

- Check to make sure that the problem is not a single misplaced cartridge.
- If it is not, audit the LSM to update the ACSLS database to match the actual contents of the library.
- Vary the LSM offline and back offline to recover the volume.

2479 I Volume identifer *vol_id* already found absent

Explanation: The Manual Volume Delete utility (del_vol) was run for a volume that is already marked as absent in the database, but the delete option (–d) was not specified. The volume remains in absent status.

Variable: *vol_id* identifies the absent volume.

Action Required: None. This message is informational only.

2480 E EXEC SQL Unable to mark volume *vol_id* as absent because of a database error

Explanation: ACSLS could not find a volume in the library and attempted to mark it absent, but the ACSLS database interface returned an unusual status to the volumetable update. The database update failed.

Variable: *vol_id* identifies the absent volume.

Action Required:

1. Stop ACSLS (**kill.acsss**).
2. Stop the database (**db_command stop**).
3. Kill any hanging ACSLS processes.
4. Restart ACSLS (one time).
5. If the problem persists, you need the help of ACSLS software support to verify that the table volumetable exists and that the "acsss" user has the proper permissions to update it. Collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2481 E EXEC SQL Unable to mark volume *vol_id* as ejected because of a database error

Explanation: ACSLS ejected a volume and attempted to mark it as ejected. The ACSLS database interface returned an unusual status to a volumetable update. The database update failed.

Variable: *vol_id* identifies the ejected volume.

Action Required:

1. Stop ACSLS (**kill.acsss**).
2. Stop the database (**db_command stop**).
3. Kill any hanging ACSLS processes.
4. Restart ACSLS (one time).

5. If the problem persists, you need the help of ACSLS software support to verify that the table volumetable exists and that the “acsss” user has the proper permissions to update it. Collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

2482 E Volume *vol_id* was not found and will be marked absent

Explanation: ACSLS did not find the specified volume in its home cell. If the volume was recorded as mounted on a drive, ACSLS did not find it on the drive. The volume will be marked absent in the database. An audit of the ACS or LSM may find the absent volume.

Variable: *vol_id* identifies the volume that ACSLS did not find.

Action Required: None. This message is informational only.

2483 E License Key expires in *nn* days: Product *product_id*

Explanation: ACSLS logs this message as the license expiration date approaches, beginning 60 days prior to expiration and specifying the number of days remaining.

Variable:

- nn is the number of days remaining before the license expires.
- *product_id* is the the ACSLS product name and version.

Action Required: Purchase a new license key from StorageTek before the expiration date.

2484 E License Key has expired: Product *product_id*

Explanation: This message warns that your license key has expired. ACSLS will not come up.

Variable: *product_id* is the the ACSLS product name and version.

Action Required: Purchase a new license key from StorageTek.

2485 E License Key information not found: Product *product_id*

Explanation: ACSLS logs this message when license key information is not entered before attempting to bring up the ACSLS server. ACSLS fails to come up.

Variable: *product_id* is the ACSLS product name and version.

Action Required:

1. Run the `licensekey.sh` script and insert License Key information.
2. Run `rc.access.`

2486 E License Key validation error: Product *product_id*

Explanation: ACSLS logs this message when the licensekey information is entered incorrectly when running the `licensekey.sh` script or when licensekey information in the database table is tampered with.

Variable: *product_id* is the ACSLS product name and version.

Action Required: Use the `licensekey.sh` script to re–enter the licensekey information correctly.

2487 E `License License library slot capacity exceeded: Product product_id, volume count nn, licensed slots ss.`

Explanation: ACSLS logs this message when the library volume count exceeds the licensed slot capacity.

Variable:

- *product_id* is the ACSLS product name and version.
- *nn* is the library volume count, excluding Absent/Missing/Ejected cartridges.
- *ss* is the licensed slot capacity.

Action Required: Either:

- Reduce the number of volumes entered in the library, or
- Purchase a new license that supports more slots from StorageTek.

2488 E `EXEC SQL lock timeout on delete from table`

Explanation: An attempt to delete a locked record from the database has failed.

Variable: *table* is the name of the locked table

Action Required:

1. Restart the application server.
2. If the problem persists, restart the database.

2489 E `EXEC SQL delete from table failed`

Explanation: An attempt to delete records from the table failed.

Variable: *table* is the name of the table.

Action Required:

1. Restart the application server.
2. If the problem persists, restart the database.

2490 E EXEC SQL select count(*col_name*) from *table* failed

Explanation: An attempt to count the number of records from the table has failed.

Variable:

- *col_name* is the name of one of the columns in the table.
- *table* is the name of the table.

Action Required:

1. Restart the application server.
2. If the problem persists, restart the database.

5002 E Received incorrect byte count from input socket: *byte_count*

Explanation: An internal communication between components has failed.

Variable: *byte_count* is the count of bytes read.

Action Required: Retry the command.

5003 E Received invalid request type: *req_type*

Explanation: An internal communication between components has failed.

Variable: *req_type* is the value of the invalid request.

Action Required: Retry the command.

5004 E Received invalid Sense Code: *sense_code*

Explanation: An internal communication between components has failed.

Variable: *sense_code* is the value sent by the hardware.

Action Required: Retry the command.

5005 E Received invalid Status request type: *req_type*

Explanation: An unexpected response was detected from the hardware.

Variable: *req_type* is the value of the invalid status request.

Action Required: Collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

5006 E Unexpected LH failure. Sense code is *sense_code*

Explanation: An unexpected response was detected from the hardware.

Variable: *sense_code* is the value sent by the hardware.

Action Required: Verify that the hardware is online. Check the LSM logs for more information.

5007 E Unexpected LSM failure. Sense code is *sense_code*

Explanation: An unexpected response was detected from the hardware.

Variable: *sense_code* is the value sent by the hardware.

Action Required: Verify that the hardware is online. Check the LSM logs for more information.

5008 E Received 0 bytes from device: *dev_name*

Explanation: The SCSI device driver may not have been properly installed.

Variable: *dev_name* is the name of the device being opened, i.e., /dev/mchanger4.

Action Required: Verify that the hardware is online. Check the LSM logs for more information.

5009 E `No data received after forking process`

Explanation: The scsiLh was not able to communicate with the scsiDP. The SCSI device driver may not have been properly installed.

Action Required: Verify that the hardware is online. Check the LSM logs for more information.

5010 E `Failed to create UNIX process for device:` *`dev_name`*

Explanation: The scsilh_im was not able to communicate with the scsiDP.

Variable: *`dev_name`* is the name of the device being opened, i.e., /dev/mchanger4.

Action Required: Restart ACSLS and if the problem persists, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

5011 E `Failed to set up read/Wait for process`

Explanation: The scsiLh encountered an internal error.

Action Required: Restart ACSLS and if the problem persists, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

5012 E Starting new UNIX process *dev_name*

Explanation: The scsiDP died and was restarted by the scsilh_im.

Variable: *dev_name* is the name of the device being opened, i.e., /dev/mchanger4.

Action Required: Retry the command. and if the problem persists, collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

5013 E Received incorrect byte count from shared memory: *byte_count*

Explanation: An internal communication between components has failed.

Variable: *byte_count* is the count of bytes read.

Action Required: Retry the command, and if the problem persists, collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

5014 E Error received from call to smc library: *error_code*

Explanation: An internal communication between components has failed.

Variable: *error_code* is the error code returned by the smc library.

Action Required: Verify that the hardware is online. Check the LSM logs for more information.

5015 E Failed to write to socket: *socket_name*

Explanation: An internal communication between components has failed.

Variable: *socket_name* is the name of the socket.

Action Required: Retry the command, and if the problem persists, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

5016 E Timed out on request: *req_name*

Explanation: The hardware took longer than expected to respond.

Variable: *req_name* is the name of the request.

Action Required: Verify that the hardware is online. Check the LSM logs for more information. If the problem persists, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

5017 E Received too many (*nnn*) bytes in response to internal command: *byte_count*

Explanation: An internal communication between components has failed.

Variable: *byte_count* is the count of bytes read.

Action Required: Retry the command, and if the problem persists, collect relevant ACSLS data (see “Gathering Diagnostic Information for ACSLS Issues” on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

5018 E Unexpected startup data received from process: *aString*

Explanation: An internal communication between components has failed.

Variable: *aString* is the string that was read from the hardware.

Action Required: Verify that the hardware is online. Check the LSM logs for more information. Retry the command, and if the problem persists, collect relevant ACSLS data (see "Gathering Diagnostic Information for ACSLS Issues" on page four of this ACSLS Version 6.1.1 Messages manual). Then contact StorageTek Software Support.

5019 E Recovering scsiDP: *aString*

Explanation: A communication error occurred between the library and ACSLS.

Variable: *aString* is the scsiDP process description.

Action Required: None. If you see these messages frequently, you may be experiencing cable problems.

Glossary

absent cartridge—A volume that is in the database, but that couldn't be found when all recorded locations for the volume were catalogued. If a nonzero retention period is set, the volume status is changed to STATUS_VOLUME_ABSENT.

ACS—*See* Automated Cartridge System**.**

ACSEL—*See* ACS Event Logger.

ACS Event Logger (ACSEL)—The software component that receives messages from other ACSLS components and writes them to an Event Log.

ACS ID—A unique identifier for an ACS.

ACSLH—*See* ACS Library Handler.

ACS library—A library is composed of one or more ACSs, attached tape drives, and cartridges residing in the ACSs.

ACS Library Handler (ACSLH)—The part of the ACSLM that communicates directly with the LMU.

ACSLM—*See* ACS Library Manager.

ACS Library Manager (ACSLM)—The software component that validates and routes library requests and responses.

ACSLS—*See* ACS Library Software.

ACSLS database—ACSLS database containing information about the location and status of the tape cartridges. The information includes cell location, scratch status, etc.)

ACSLS platform—The server hardware and software that provide the proper environment for ACSLS.

ACS Library Software (ACSLS)— Manages ACS library contents and controls ACS library hardware to mount and dismount cartridges on ACS cartridge drives.

ACSLS database—A database used by ACSLS to track the library configuration and the locations and IDs of all tape cartridges in the library.

ACSSA— *See* ACS System Administrator.

ACS System Administrator (ACSSA)—The interface between the Command Processor and the rest of the system.

ADI—Application Data Interchange.

audit—A physical inventory of the contents of all or part of a library.

Automated Cartridge System (ACS)—The library subsystem consisting of a single or dual LMU, and 1 to 24 LSMs connected to that LMU.

automated library—*See* library.

beginning of tape (BOT)—The location on a tape where written data begins.

BOT— *See* Beginning of Tape.

CAP—*See* Cartridge Access Port.

CAP ID—A unique identifier for the location of a CAP. A CAP ID consists of the ACS ID, the LSM number, and the CAP number.

cartridge—A plastic housing containing a length of data recording tape. The tape is threaded automatically when loaded in a transport. A plastic leader block is attached to the tape for automatic threading. The spine of the cartridge can contain an OCR/Bar Code label listing the volume ID.

Cartridge Access Port (CAP)—A bidirectional port built into the door panel of an LSM, which provides for the manual entry or automatic ejection of tape cartridges.

cartridge drive (CD)—A device containing two or four cartridge transports and their associated power and pneumatic supplies.

cartridge tape I/O driver—Operating system software which issues commands (e.g., read, write, and rewind) to cartridge subsystems.

cartridge transport—An electromechanical device that moves tape from a cartridge over a head that writes and reads data from the tape. A transport is distinct from the power and pneumatic sources that supply the electricity and air it needs to function. *See* cartridge drive.

CCI—*See* client computing system.

CD—*See* cartridge drive.

cell—A receptacle in the LSM in which a cartridge is stored.

channel—A device that connects the host and main storage with the input and output control units.

client applications—Software applications that manage tape cartridge contents. They access tape cartridges by interacting with ACSLS. Any number of client applications can be resident on a client system.

client computing system—A computer and an executable image of the operating system.

client software— This software manages tape cartridge contents, generates requests for cartridges, and transfers data to and from cartridges. The client software is *not* part of ACSLS.

Client System Component—Software which provides an interface between the client computing system's operating system and ACSLS.

Client System Interface (CSI)— The software component that translates and routes messages between the ACS Library Manager and the Client System Component.

command access control—Limits access to commands.

command area—The bottom area of the cmd_proc interface where you enter requests and receive responses.

command processor (cmd_proc)— The screen interface of the ACSSA. cmd_proc lets you enter the commands described in Chapter 7.

control path adapter—A hardware device which converts a Client Computing System's control protocol to the control protocol of the StorageTek Library Control System.

control unit (CU)—A microprocessor-based unit logically situated between a channel and up to sixteen cartridge transports. The CU translates channel commands into transport commands and sends transport status to the channel.

CSE—Customer Services Engineer.

CSC—Client System Component.

CSI—*See* Client System Interface.

CSI variables—Used to define various options to fine–tune communications between a CSC and the CSI. You change these variables in the `acsss_config` program.

CU—*See* control unit.

cycle error messages—Messages that indicate a library or ACSLS failure.

database—A collection of interrelated data records. *See also* ACSLS Database.

data path—The network path that allows client applications read/write access to tape cartridges.

data path adapter—A hardware device which translates a Client Computing System's data protocol to the data protocol of the StorageTek Control Unit.

display area—The top area of the cmd_proc interface that collects messages regarding the status of the library.

ejected cartridge—A volume that has been ejected from the library. If a nonzero retention period is set, the volume status is changed to STATUS_VOLUME_EJECTED.

end of tape (EOT)— The location on a tape where written data ends.

EOT— *See* end of tape.

EPO—Emergency Power Off.

EPROM—*See* erasable programmable read only memory.

erasable programmable read-only memory (EPROM)—A special memory chip that can be erased and reprogrammed.

Event Log—A file, maintained by the ACSEL, that contains messages describing library and ACSLS events.

Event Logger—*See* ACS Event Logger.

external label identifiers— A six–character alphanumeric label on the outside edge of a cartridge used to identify a physical tape volume. It may consist of uppercase letters A through Z, numerals 0 through 9, $, #, and blanks.

full installation—A complete software installation required for new customer sites or for existing sites where a new library has been installed.

home location—The cell associated with a given cartridge.

ID—Identifier or identification.

Informix—The relational database used by ACSLS 6.1.

Informix Storage Manager (ISM)—The Informix database manager, which manages database backups and offloaded transaction logs.

Initial Program Load (IPL)—A process that activates a machine reset, initiates wake up diagnostics (from EPROMs) and loads functional code.

inline diagnostics— Routines that test components of a subsystem while operating on a time-sharing basis with the functional microcode in the subsystem component.

in–transit cartridges—Cartridges between their source and destination locations. Cartridges are considered in–transit if they are in pass–thru ports, robot hands, or playground.

I/O—Input/Output.

IPC—Interprocess Communication.

IPL—*See* Initial Program Load.

ISM—*See* Informix Storage Manager.

journal—A sequential log of changes made to the database since the last checkpoint.

LAD— Lock Access Door.

LAN—*See* local area network.

large CAP (LCAP)—A 40–cartridge CAP with the storage cells arranged in four removable magazines of ten cells each. The magazines appear as a single column of 40 cells to the host software.

LCAP—*See* large CAP.

LCU—*See* Library Control Unit.

LED—*See* Light Emitting Diode.

library—A library is composed of one or more ACSs, attached tape drives, volumes in the ACSs, and the ACSLS software that controls and manages the ACSs.

library configuration options—Allows the customer to specify the number of ACSs in the library and the connections between each ACS and the server system.

library control component—Software which controls the mounting and dismounting of cartridges in the ACS.

library control processor—Properly configured computer hardware that, with the addition of appropriate software, supports the operation of the Library Control Software.

library control system—The library control platform loaded with library control software (ACSLS).

library control software—The software components of ACSLS including the library control component, the Client System Interface and Library Utilities.

Library Control Unit—The portion of the LSM that controls the picking, mounting, dismounting, and replacing of tape cartridges.

library drive—A cartridge transport attached to an LSM that is connected to, and controlled by, a client system. Library drives interact with the LCU during automated tape cartridge mount and dismount operations. Library drives interact with a client application during tape data transfer operations. Library drives are individually addressable by the ACSLM and are individually accessible by client applications. *See* Cartridge Transport.

library errors—Errors that occur because the library is offline, has suffered hardware failure, is unavailable, etc.

Library Management Unit (LMU)—The portion of an ACS that manages LSM's, allocates their resources, and communicates with ACSLS.

Library Storage Module (LSM)—An ACS structure that provides the storage area for cartridges, cartridge drives, CAPs, and the robot necessary for moving them.

light emitting diode (LED)—A light emitting device that uses little energy and is used mainly to indicate on/off conditions.

LMU—*See* Library Management Unit.

local area network (LAN)—A computer network in which any component in the network can access any other component. This is the type of interface between an LMU and attached LSM's.

LSM—*See* Library Storage Module.

LSM ID—A unique identifier for an LSM. The LSM ID consists of the ACS ID and the LSM number.

missing cartridge—A volume that is in the database, but couldn't be found. If a recorded possible location for the volume could not be examined due to an offline LSM or a drive not communicating, the volume is marked MISSING instead of ABSENT. The volume status is changed to STATUS_VOLUME_MISSING.

network adapter—Equipment that provides an electrical and logical interface between a network and specific attached equipment.

Network Interface (NI)—An interface between the server system and the client systems that maintains network connections and controls the exchange of messages. The NI is resident on the server system and each client system.

NI—*See* Network Interface.

OCR—Optical character recognition.

ONC—Open network computing.

Open Systems Interconnection (OSI)—A software architecture model of the International Organization for Standardization. The OSI model provides standards for the interconnection of data processing systems.

OSI— *See* Open Systems Interconnection.

OSLAN—Open Systems Local Area Network.

Pass–Thru Port (PTP)—Mechanism that allows a cartridge to be passed from one LSM to another in a multiple LSM ACS.

PCAP—*See* priority CAP.

playground—A reserved area of special cells (within an LSM) used for storing diagnostic cartridges and cartridges found in–transit upon power–on and before initialization of the LSM is completed.

pool—A collection of tape cartridges having one or more similar features or attributes, such as a pool of scratch tapes.

POST—Power–on self–test.

priority CAP (PCAP)—A single–cartridge CAP used for priority entry and ejection of cartridges.

processing errors—Errors that result from processing or network communication failures.

PROM—Programmable read-only memory.

PTP—*See* Pass–Thru Port.

RDBMS—Relational database management system.

redo log files—Backup files used to restore the ACSLS database.

relational database—A database that is organized and accessed according to relationships between the data items; relationships are represented by tables.

ROM—Read–only memory.

RPC—Remote Procedure Call.

SCAP—*See* standard CAP.

scratch—An attribute of a tape cartridge, indicating that it is blank or contains no useful data.

SCSI—Small computer serial interface.

second disk journaling—Allows for the database's journal records to be written to a second disk device, instead of writing records to the primary disk. This improves the chances of recovery from a disk failure.

server system—The part of the library that is the residence for ACSLS, now referred to as the Library Control System. The Library Control System acts as an interface between a library and client systems.

server system user—A person who invokes ACSLS commands, utilities, or procedures on the server system. Server system users are generally site and maintenance personnel (for example, library operators, tape librarians, system administrators, CSEs, and systems personnel).

servo—A system that uses feedback to control a process.

silo—A commonly used term for an LSM. *See* Library Storage Module.

SIMM—Single inline memory module.

SQL—*See* structured query language.

SRN. *See* service request number.

SSI—*See* Storage Server Interface.

SSR—Software Support Representative.

Standard CAP (SCAP)—A 21–cartridge CAP with the storage cells arranged in three rows of seven fixed cells.

Storage Server Interface (SSI)—A software component, resident on a client system, that translates and routes messages between client applications and the CSI.

structured query language (SQL)—A language used to define, access, and update data in a database.

system resource variable—Used to control the amount of system resources used by ACSLS.

system unit—The Library Control Platform.

tape library management system (TLMS)— A type of client application.

TCP—Transmission Control Protocol.

TLMS—*See* tape library management system.

TOD—Time of day.

UDP—User Datagram Protocol.

UNIX—An operating system originally developed by Bell Laboratories (now UNIX Systems Laboratories, Inc.) and used by a variety of computer systems.

unsolicited messages—Messages that indicate an error or notify you when a particular routine action can be taken.

UOC—Usable on codes.

upgrade installation—Performed when installing a new version of ACSLS at an existing customer site.

user–selectable features and options variables—Used to define various user–selectable features and options.

validation errors—Errors that result from format and syntax validation performed by cmd_proc.

virtual label—A logical label that can be assigned to a cartridge when its physical label is missing or unreadable.

volser—Volume Serial Number.

volume—A tape cartridge.

volume access control—Limits access to volumes, usually by the client.

volume identifier—A six-character string that uniquely identifies a tape cartridge to the database.

volume serial number (volser)—A synonym for external label identifier.

WTM—write tape mark.

XDR— External data representation.

XML—Extensible Markup Language. A universal format for structured documents and/or data on the Web.